

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 08:01:06 ; Search time 59 Seconds
(without alignments)
871.587 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPQLGPEAAALRPGWLALL.....DLVQDCHQGRELKFLCMLR 182

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 1586107 seqs, 282547505 residues

Word size : 0
Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : A_Geneseq_29Jan04:*
1: Geneseqp1980s:*
2: Geneseqp1990s:*
3: Geneseqp2000s:*
4: Geneseqp2001s:*
5: Geneseqp2002s:*
6: Geneseqp2003as:*
7: Geneseqp2003bs:*
8: Geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Length	DB	ID	Description
1	182	100.0	182	3	AAY91393	Aay91393 Human pro
2	182	100.0	182	4	AAB95695	Aab95695 Human pro
3	182	100.0	182	6	ABC03563	Abu03563 Angiogene
4	182	100.0	182	6	ABR47459	Abr47459 Breast ca
5	182	100.0	209	3	AAY91447	Aay91447 Human sec
6	127	69.8	182	4	AAU12257	Aau12257 Human PRO
7	127	69.8	182	4	AAB48066	Aab48066 Human ext
8	127	69.8	182	6	ABO17701	Abol7701 Novel hum
9	127	69.8	182	6	ABU80955	Abu80955 Human PRO
10	127	69.8	182	6	ABU66655	Abu66655 Human PRO
11	127	69.8	182	6	ABU59736	Abu59736 Novel sec
12	127	69.8	182	6	ABO24926	Abu24926 Human sec
13	127	69.8	182	6	ABU66931	Abu66931 Human sec
14	127	69.8	182	6	ADA45691	Ada45691 Novel hum
15	127	69.8	182	6	ADA76122	Ada76122 Human PRO
16	127	69.8	182	6	ADA18772	Ada18772 Human PRO
17	127	69.8	182	6	ADA61395	Ada61395 Homo sapi
18	127	69.8	182	6	ADB19180	Adb19180 Novel hum
19	127	69.8	182	6	ADB27721	Adb27721 Human PRO
20	127	69.8	182	6	ADA86200	Ada86200 Novel hum
21	127	69.8	182	6	ADB15764	Adb15764 Human PRO
22	127	69.8	182	6	ADA47550	Ada47550 Human PRO
23	127	69.8	182	6	ADA67345	Ada67345 Human PRO
24	127	69.8	182	6	ADB30352	Adb30352 Human PRO
25	127	69.8	182	6	ADA85648	Ada85648 Novel hum

26	127	69.8	182	6	ADA96860	Ada96860 Human PRO
27	127	69.8	182	6	ADA79164	Ada79164 Human PRO
28	127	69.8	182	6	ADA87303	Ada87303 Novel hum
29	127	69.8	182	6	ADB16505	Adb16505 Human PRO
30	127	69.8	182	6	ADA91597	Ada91597 Novel hum
31	127	69.8	182	6	ADB14660	Adb14660 Human PRO
32	127	69.8	182	6	ADB18621	Adb18621 Novel hum
33	127	69.8	182	6	ADA93836	Ada93836 Human PRO
34	127	69.8	182	6	ADB19732	Adb19732 Novel hum
35	127	69.8	182	6	ADB13044	Adb13044 Human PRO
36	127	69.8	182	6	ABO43234	Abo43234 Novel hum
37	127	69.8	182	6	ADA74298	Ada74298 Human PRO
38	127	69.8	182	6	ADB24531	Adb24531 Human PRO
39	127	69.8	182	6	ADA82055	Ada82055 Human PRO
40	127	69.8	182	6	ADA75018	Ada75018 Human PRO
41	127	69.8	182	6	ADA85096	Ada85096 Novel hum
42	127	69.8	182	6	ADA84544	Ada84544 Novel hum
43	127	69.8	182	6	ADB29800	Adb29800 Human PRO
44	127	69.8	182	6	ADA80328	Ada80328 Human PRO
45	127	69.8	182	6	ADA75570	Ada75570 Human PRO
46	127	69.8	182	6	ADA46795	Ada46795 Human PRO
47	127	69.8	182	6	ADB25091	Adb25091 Human PRO
48	127	69.8	182	6	ADA93267	Ada93267 Human PRO
49	127	69.8	182	6	ADB26617	Adb26617 Human PRO
50	127	69.8	182	6	ADB30904	Adb30904 Human PRO
51	127	69.8	182	6	ADA60832	Ada60832 Homo sapi
52	127	69.8	182	6	ADB23979	Adb23979 Human PRO
53	127	69.8	182	6	ADA96308	Ada96308 Human PRO
54	127	69.8	182	6	ADA80880	Ada80880 Human PRO
55	127	69.8	182	6	ADA95756	Ada95756 Human PRO
56	127	69.8	182	6	ADB26065	Adb26065 Human PRO
57	127	69.8	182	6	ADB21550	Adb21550 Novel hum
58	127	69.8	182	7	ADA77329	Ada77329 Human PRO
59	127	69.8	182	7	ADB18069	Adb18069 Human PRO
60	127	69.8	182	7	ADA86752	Ada86752 Novel hum
61	127	69.8	182	7	ADA87855	Ada87855 Novel hum
62	127	69.8	182	7	ADA46243	Ada46243 Novel hum
63	127	69.8	182	7	ADB28273	Adb28273 Human PRO
64	127	69.8	182	7	ADB28825	Adb28825 Human PRO
65	127	69.8	182	7	ADA76777	Ada76777 Human PRO
66	127	69.8	182	7	ADA88407	Ada88407 Novel hum
67	127	69.8	182	7	ADA97412	Ada97412 Human PRO
68	127	69.8	182	7	ADB27169	Adb27169 Human PRO
69	127	69.8	182	7	ADB22102	Adb22102 Novel hum
70	127	69.8	182	7	ADA66793	Ada66793 Human PRO
71	127	69.8	182	7	ADB22654	Adb22654 Human PRO
72	127	69.8	182	7	ADB23427	Adb23427 Human PRO
73	127	69.8	182	7	ADA92149	Ada92149 Novel hum
74	127	69.8	182	7	ADB15212	Adb15212 Human PRO
75	127	69.8	182	7	ADB38464	Adb38464 Novel hum
76	127	69.8	182	7	ADB37912	Adb37912 Novel hum
77	127	69.8	182	7	ADB66384	Adb66384 Novel hum
78	127	69.8	182	7	ADB89464	Adb89464 Human PRO
79	127	69.8	182	7	ADB90196	Adb90196 Human PRO
80	127	69.8	182	7	ADB39297	Adb39297 Novel hum
81	127	69.8	182	7	ADB46920	Adb46920 Novel hum
82	127	69.8	182	7	ADB86527	Adb86527 Human PRO
83	127	69.8	182	7	ADB77132	Adb77132 Novel hum
84	127	69.8	182	7	ADB34289	Adb34289 Human PRO
85	127	69.8	182	7	ADB35393	Adb35393 Human PRO
86	127	69.8	182	7	ADB33737	Adb33737 Human PRO
87	127	69.8	182	7	ADB34841	Adb34841 Human PRO
88	127	69.8	182	7	ADB35945	Adb35945 Human PRO
89	127	69.8	182	7	ADB46340	Adb46340 Novel hum
90	127	69.8	182	7	ADC50213	Adc50213 Novel hum
91	127	69.8	182	7	ADC71760	Adc71760 Novel hum
92	127	69.8	182	7	ADC59739	Adc59739 Novel hum
93	127	69.8	182	7	ADC52746	Adc52746 Novel hum
94	127	69.8	182	7	ADC57100	Adc57100 Novel hum
95	127	69.8	182	7	ADC60291	Adc60291 Novel hum
96	127	69.8	182	7	ADC50766	Adc50766 Novel hum
97	127	69.8	182	7	ADC65293	Adc65293 Human PRO
98	127	69.8	182	7	ADC54391	Adc54391 Novel hum

99 127 69.8 182 7 ADC53352 Adc53352 Novel hum
100 127 69.8 182 7 ADC58875 Adc58875 Novel hum

ALIGNMENTS

RESULT 1
ID AAY91393 standard; protein; 182 AA.
XX AAY91393;
AC AAY91393;
XX 29-JUN-2000 (first entry)
XX Human secreted protein sequence encoded by gene 48 SEQ ID NO:114.
DE Human; secreted protein; diagnosis; neuroprotective; ncotropic;
XX neuroleptic; antimanic; cerebroprotective; immunomodulatory;
KW anti-microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
KW anticonvulsant; vasotropic; vaccine; gene therapy; anti-sense therapy;
KW neural; reproductive; immune disorder; immunodeficiency; infection;
KW lymphoma; demyelinating disease; autoimmunity; cancer; inflammation;
KW aneurysm; haemorrhage; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; Tourette syndrome; multiple sclerosis; meningitis;
KW ischaemia; mania; dementia; obsessive compulsive disorder;
KW viral prophylaxis; developmental disorder; sexually-linked disorder;
KW cardiovascular disorder; food additive; preservative.

XX Homo sapiens.
OS WO200011014-A1.
XX 02-MAR-2000.
XX 24-AUG-1999; 99WO-US019330.
XX 25-AUG-1998; 98US-0097917P.
XX 31-AUG-1998; 98US-0098634P.
XX (HJMA-) HUMAN GENOME SCI INC.
XX Moore PA, Ruben SM, Olsen HS, Shi Y, Rosen CA, Florence KA;
PI Scppet DR, Lafleur DW, Endress GA, Ebner R, Komatsoulis G, Duan RD;
XX MPI; 2000-224656/19.
XX N-PSDB; AAA26328.

XX Novel secreted proteins and corresponding DNA molecules that can be used
PT to prevent, treat and diagnose disease in humans, for example,
PT Alzheimer's, cancer, and immune disorders.
XX Claim 11; Page 380-381; 416pp; English.

XX The polynucleotide sequences given in AAA26281 to AAA26336 encode the
CC human secreted proteins given in AAY91346 to AAY91449. The human secreted
CC proteins can have activities based on the tissues and cells they are
CC expressed in. Examples of the activities are: neuroprotective; ncotropic;
CC neuroleptic; antimanic; cerebroprotective; immunomodulatory; anti-
CC microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
CC anticonvulsant; and vasotropic. The polynucleotides and proteins may be
CC used to prevent, treat or ameliorate a medical condition, e.g. by protein
CC or gene therapy. Conditions treatable by the proteins of the invention
CC include neural, reproductive, or immune disorders, especially
CC immunodeficiency, infection, lymphomas, demyelinating diseases, auto-
CC immunities, cancer, general microbial infection, inflammation, aneurysms
CC and haemorrhages. Specific examples include: Alzheimer's disease;
CC Parkinson's; Huntington's; Tourette syndrome; multiple sclerosis;
CC meningitis; ischaemia; prostate cancer; mania; dementia; obsessive
CC compulsive disorder and viral prophylaxis. The polynucleotides and
CC proteins can also be used in the detection of disorders associated with
CC the function of the protein, for example, the detection of developmental
CC disorders, sexually-linked disorders, or disorders of the cardiovascular

CC system. They may also be used as food additives or preservatives.
CC AAA26272 to AAA26280 and AAY91345 are sequences used in the
CC exemplification of the present invention

XX SQ Sequence 182 AA;

Query Match 100.0%; Score 182; DB 3; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLSYPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLSYPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
Db 121 QNEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
QY 181 LR 182
Db 181 LR 182

RESULT 2

AAB95695
ID AAB95695 standard; protein; 182 AA.
XX AAB95695;
XX 26-JUN-2001 (first entry)
DE Human protein sequence SEQ ID NO:18516.

XX Human; primer; detection; diagnosis; antisense therapy; gene therapy.

XX Homo sapiens.

XX EP1074617-A2.

XX 07-FEB-2001.

XX 28-JUL-2000; 2000EP-00116126.

XX 29-JUL-1999; 99JP-00248036.

XX 27-AUG-1999; 99JP-00300253.

XX 11-JAN-2000; 2000JP-00118776.

XX 02-MAY-2000; 2000JP-00183767.

XX 09-JUN-2000; 2000JP-00241899.

XX (HELI-) HELIX RES INST.

XX Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;

XX Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;

XX WPI; 2001-318749/34.

XX Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.

XX Claim 8; SEQ ID NO 18516; 2537pp + Sequence Listing; English.

XX The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination

CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention

XX Sequence 182 AA;

Query Match 100.0%; Score 182; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
|||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120
|||
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 ONEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
|||
Db 121 ONEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180

QY 181 LR 182
||
Db 181 LR 182

RESULT 3

ABU03563
ID ABU03563 standard; protein; 182 AA.

XX AC ABU03563;

DT 21-JAN-2003 (first entry)

XX Angiogenesis-associated human protein sequence #108.

DE Human; angiogenesis-associated transcript; angiogenesis;
XX angiogenesis-associated disease; cancer; cytostatic.

OS Homo sapiens.

PN WO200279492-A2.

XX PD 10-OCT-2002.

XX PF 14-FEB-2002; 2002WO-US004915.

XX PR 14-FEB-2001; 2001US-00784356.

XX PR 22-FEB-2001; 2001US-00791390.

XX PR 19-APR-2001; 2001US-0285475P.

XX PR 03-AUG-2001; 2001US-0310025P.

XX PR 13-NOV-2001; 2001US-0350666P.

XX PR 29-NOV-2001; 2001US-0334244P.

XX PA (EOSB-) ECS BIOTECHNOLOGY INC.

XX PI Murray R, Glynn R, Watson SR, Aziz N;

XX WPI; 2003-040681/03..

DR N-PSDB; ABX08847.

XX Detecting angiogenesis-associated transcript in a cell for diagnosing and
PT treating cancer by contacting a sample with a polynucleotide that
PT exhibits changes in expression level as a function of time in tissue
PT undergoing angiogenesis.

PS Example 2; Page 282; 291pp; English.

XX The present invention relates to methods and compositions for detecting
CC an angiogenesis-associated transcript in a cell in a patient. The method
CC involves contacting a biological sample from the patient with a
CC polynucleotide that selectively hybridises to a sequence at least 80%
CC identical to any of the angiogenesis-associated human polynucleotide
CC sequences given in the specification. These angiogenesis-associated
CC polynucleotide sequences comprise genes that exhibit changes in
CC expression levels as a function of time in tissue undergoing
CC angiogenesis. The method and the polynucleotide sequences of the
CC invention are useful for diagnosing and treating angiogenesis and
CC angiogenesis-associated diseases e.g. cancer. The polynucleotide
CC sequences are also useful in the gene therapy of such disorders. The
CC angiogenesis-associated proteins encoded by the polynucleotide sequences
CC are useful as a vaccine for therapeutic and prophylactic immunisation.
CC ABU03456-ABU03569 represent angiogenesis-associated protein sequences

XX Sequence 182 AA;

Query Match 100.0%; Score 182; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
|||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120
|||
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 ONEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
|||
Db 121 ONEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180

QY 181 LR 182
||
Db 181 LR 182

RESULT 4

ABR47459
ID ABR47459 standard; protein; 182 AA.

XX AC ABR47459;

XX DT 12-JUN-2003 (first entry)

XX Breast cancer associated protein sequence SEQ ID NO:150.

XX Human; breast cancer; cytostatic; gene therapy.

OS Homo sapiens.

XX PN WO2003004989-A2.

XX PD 16-JAN-2003.

XX PF 21-JUN-2002; 2002WO-US019669.

XX PR 21-JUN-2001; 2001US-0299887P.

XX PR 27-JUN-2001; 2001US-0301572P.

XX PR 18-JUL-2001; 2001US-0306501P.

XX PR 25-SEP-2001; 2001US-0325002P.

XX PR 05-MAR-2002; 2002US-0362585P.

PR 14-MAY-2002; 2002US-0380391P.
XX (MILL-) MILLENITUM PHARM INC.
PA Lillie J, Gannavarapu M, Glatt K, Hoersh S, Kamatkar S;
PI Mertens M, Monahan JE, Myer V, Wang Y, Xu Y, Zhao X, Meyers RE;
PI Bast RC, Kortobagyi GN, Pusztai L, Meric F, Sahin A, Mills GB;
XX WPI; 2003-210381/20.
DR N-PSDB; ACC50151.
XX
PT Breast cancer diagnosis or treatment by comparing the level of expression
PT of a marker in a patient sample with that in the control non-breast
PT cancer sample.
XX
PS Claim 1; SEQ ID NO 150; 128pp; English.
XX
CC The present invention describes a method for assessing whether a patient
CC is afflicted with breast cancer. The method comprises comparing the level
CC of expression of a marker (gene/polypeptide see ACC50076 to ACC50334 and
CC ABR47386 to ABR47632) in a patient sample and the normal level of
CC expression of the marker in a control non-breast cancer sample, where a
CC significant increase in the level of expression of the marker in the
CC patient sample and the normal level is an indication that the patient is
CC afflicted with breast cancer. The breast cancer associated sequences from
CC the present invention have cytostatic activities and can be used in gene
CC therapy. The method is useful for diagnosing and treating breast cancer.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 182; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120
Qy 121 QNEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
Db 121 QNEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
Qy 181 LR 182
Db 181 LR 182

RESULT 5
ID AAY91447 standard; protein; 209 AA.
XX
AC AAY91447;
XX
DT 29-JUN-2000 (first entry)
DE Human secreted protein sequence encoded by gene 48 SEQ ID NO:168.
XX
KW Human; secreted protein; diagnosis; neuroprotective; nootropic;
KW neuroleptic; antimanic; cerebroprotective; immunomodulatory;
KW anti-microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
KW anticonvulsant; vasotropic; vaccine; gene therapy; anti-sense therapy;
KW neural; reproductive; immune disorder; immunodeficiency; infection;
KW lymphoma; demyelinating disease; autoimmunity; cancer; inflammation;
KW aneurysm; haemorrhage; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; Tourette syndrome; multiple sclerosis; meningitis;
KW ischaemia; mania; dementia; obsessive compulsive disorder;

KW viral prophylaxis; developmental disorder; sexually-linked disorder;
KW cardiovascular disorder; food additive; preservative.
XX Homo sapiens.
OS
XX
PN W0200011014-A1.
XX
PD 02-MAR-2000.
XX
PF 24-AUG-1999; 99WO-US019330.
XX
PR 25-AUG-1998; 98US-0097917P.
PR 31-AUG-1998; 98US-0098634P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Moore PA, Ruben SM, Olsen HS, Shi Y, Rosen CA, Florence KA;
PI Soppet DR, Lafleur DW, Endress GA, Ebner R, Komatsoulis G, Duan RD;
XX
DR WPI; 2000-224656/19.
XX
PT Novel secreted proteins and corresponding DNA molecules that can be used
PT to prevent, treat and diagnose disease in humans, for example,
PT Alzheimer's, cancer, and immune disorders.
XX
PS Disclosure; Page 413-414; 416pp; English.
XX
CC The polynucleotide sequences given in AAA26281 to AAA26336 encode the
CC human secreted proteins given in AAY91346 to AAY91449. The human secreted
CC proteins can have activities based on the tissues and cells they are
CC expressed in. Examples of the activities are: neuroprotective; nootropic;
CC neuroleptic; antimanic; cerebroprotective; immunomodulatory; anti-
CC microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
CC anticonvulsant; and vasotropic. The polynucleotides and proteins may be
CC used to prevent, treat or ameliorate a medical condition, e.g. by protein
CC or gene therapy. Conditions treatable by the proteins of the invention
CC include neural, reproductive, or immune disorders, especially
CC immunodeficiency, infection, lymphomas, demyelinating diseases, auto-
CC immunities, cancer, general microbial infection, inflammation, aneurysms
CC and haemorrhages. Specific examples include: Alzheimer's disease;
CC Parkinson's; Huntington's; Tourette syndrome; multiple sclerosis;
CC meningitis; ischaemia; prostate cancer; mania; dementia; obsessive
CC compulsive disorder and viral prophylaxis. The polynucleotides and
CC proteins can also be used in the detection of disorders associated with
CC the function of the protein, for example, the detection of developmental
CC disorders, sexually-linked disorders, or disorders of the cardiovascular
CC system. They may also be used as food additives or preservatives.
CC AAA26272 to AAA26280 and AAY91345 are sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 209 AA;

Query Match 100.0%; Score 182; DB 3; Length 209;
Best Local Similarity 100.0%; Pred. No. 6.9e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 28 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 87
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120
Db 88 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 147
Qy 121 QNEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
Db 148 QNEISDRKICASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 207
Qy 181 LR 182
Db 208 LR 209

RESULT 6
AAU12257
ID AAU12257 standard; protein; 182 AA.
XX
AC AAU12257;
XX
DT 24-OCT-2001 (first entry)
XX
DE Humar PRO3743 polypeptide sequence.
XX
KW Humar secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
KW prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;
KW ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
KW A-peptide; factor VIIA; gene therapy.
XX
OS Homo sapiens.
XX
PN WO200140466-A2.
XX
PD 07-JUN-2001.
XX
PF 01-DEC-2000; 2000WO-US032678.
XX
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 09-DEC-1999; 99US-0170262P.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005841.
PR 03-MAR-2000; 2000US-0187202P.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 05-JUN-2000; 2000US-0209832P.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
XX
XX (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2001-408281/43.
DR N-PSDB; AAS21329.
XX
PT Isolated , secretory and transmembrane PRO polypeptide used to detect

other PRO polypeptides, link bioactive molecules to cells expressing PRO
polypeptides, and detect the presence of mammalian tumors e.g. lung,
breast, prostate, cervical.
XX
PS Claim 12; Fig 172; 813pp; English.
XX
CC AAU12172-AAU12446 represent novel human secretory and transmembrane PRO
polypeptides. The PRO polypeptides are useful to detect other PRO
polypeptides, to link bioactive molecules to cells expressing PRO
polypeptides, to modulate biological activities of cells expressing PRO
polypeptides, and to detect the presence of mammalian lung, colon,
breast, prostate, rectal, cervical or liver tumours by comparing PRO
polypeptide expression in a cell sample to that in a control sample. Some
of the 275 sequences are also useful to stimulate the release of tumour
necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
differentiation of chondrocytes, the proliferation or gene expression in
pericyte cells, the release of proteoglycans from cartilage, the
proliferation of inner ear utricular supporting cells or of T-
lymphocytes, the release of a cytokine from peripheral blood monocytes
(PBMCs), or the proliferation of endothelial cells. Some of the PRO
polypeptides may modulate glucose or free fatty acid uptake by skeletal
muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
VIIA. The PRO polypeptides can be used in assays to identify molecules
involved in binding interactions. The polynucleotides encoding PRO
polypeptides can be used to generate probes, antisense RNA/DNA,
transgenic or knock out animals and can be used in gene therapy
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSFLPQVTSYNGRTFLGLDKC 60
Db ||||| 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSFLPQVTSYNGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWPRVFEIRLVSKY 120
Db ||||| 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWPRVFEIRLVSKY 120

Qy 121 ONEISDR 127
Db ||||| 121 ONEISDR 127

RESULT 7
AAB48066
ID AAB48066 standard; protein; 182 AA.
XX
AC AAB48066;
XX
DT 19-MAR-2001 (first entry)
XX
DE Human extracellular signaling molecule (EXCS) (ID 5090841CD1).
XX
KW Extracellular signaling molecule; EXCS; anti-inflammatory; human;
KW immunosuppressive; cytostatic; neuroprotective; gastrointestinal;
KW virucide; antibacterial; anti-HIV; human immunodeficiency virus;
KW antiinfertility; cerebroprotective; nootropic; antiulcer; antifungal;
KW anticonvulsant; tranquilizer; neuroleptic; vasotropic; gynecological;
KW keratolytic; protozoacide; gene therapy.
XX
OS Homo sapiens.
XX
PN WO200070049-A2.
XX
PD 23-NOV-2000.
XX
PF 19-MAY-2000; 2000WO-US013975.
XX
PR 19-MAY-1999; 99US-0134949P.
PR 15-JUL-1999; 99US-0144270P.

PR 30-JUL-1999; 99US-0146700P.
PR 04-OCT-1999; 99US-0157508P.
XX
XX
PA (INCY-) INCYTE GENOMICS INC.
XX Tang YT, Yue H, Lal P, Burford N, Bandman O, Baughn MR;
PI Azimzai Y, Lu DAM, Patterson C;
XX
XX
DR WPI; 2001-025021/03.
DR N-PSDB; AAC84302.
XX
PT New human extracellular signaling nucleic acids and polypeptides useful
PT for diagnosing, treating and preventing infections and gastrointestinal,
PT neurological, reproductive, and autoimmune/inflammatory disorders.
XX
PS Claim 1; Page 88-89; 114pp; English.
XX
CC The invention provides human extracellular signaling molecules (EXCS) and
CC polynucleotides which identify and encode EXCS. EXCS can be expressed by
CC standard recombinant methodology. The amino acid and nucleic acid
CC sequences of EXCS are useful for diagnosing, treating and preventing
CC infections and gastrointestinal (peptic ulcer, dysphagia, pancreatitis),
CC neurological (e.g. epilepsy, ischemic cerebrovascular disease, stroke),
CC reproductive (infertility, ovulatory defects, endometriosis), autoimmune
CC /inflammatory (actinic keratosis, acquired immunodeficiency syndrome
CC (AIDS), Addison's disease), and cell proliferative disorders including
CC cancers (of the breast, adrenal gland, bone). They may also be used to
CC treat fatal familial insomnia, nutritional and metabolic diseases of the
CC nervous system, myopathies, mental disorders (anxiety, schizophrenia,
CC mood), as well as infections caused by parasites (malaria, leishmania,
CC trypanosoma), viral (adenovirus, coronavirus, flavivirus), bacterial
CC (e.g. pneumococcus, staphylococcus, bacillus), and fungal (aspergillus,
CC blastomycetes, dermatophytes) agents. The nucleic acids, polypeptides,
CC antagonists, agonists, pharmaceutical compositions, and antibodies may
CC also be used for treating or preventing disorders associated with
CC increased or decreased expression or activity of EXCS. EXCS
CC polynucleotides may also be used to detect and quantify gene expression
CC in biopsied tissues in which expression of EXCS may be correlated with
CC the disease, to determine presence or excess expression of EXCS, to
CC monitor regulation of EXCS levels during therapeutic intervention, to
CC detect the presence of associated disorders, as targets in microarray, to
CC generate hybridization probes, and to detect differences in gene
CC sequences among normal, carrier or affected individuals. Antibodies may
CC also be used in diagnosing disorders, in monitoring patients being
CC treated with EXCS agonists, antagonists or inhibitors. Sequences AAB48057
CC -B48082 represent the EXCS of the invention
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIMRPVEIFRLVSKY 120
Db |||||
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIMRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db |||||
Db 121 QNEISDR 127

RESULT 8
ABO17701
ID ABO17701 standard; protein; 182 AA.
XX
AC ABO17701;
XX
DT 26-AUG-2003 (first entry)

XX
DE
XX
XX
KW Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
KW antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
KW TNF-alpha release; cell proliferation; cell differentiation;
KW gene expression modulator; proteoglycan release; cytokine release;
KW tumour; inflammatory disease; organ failure; atherosclerosis;
KW cardiac injury; infertility; birth defect; premature aging; AIDS;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
KW bioreactor; tissue typing.
XX
OS Homo sapiens.
XX
XX US2003032156-A1.
XX
XX 13-FEB-2003.
XX
XX 06-MAY-2002; 2002US-00140474.
XX
XX 31-MAR-1997; 97WO-US0005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR

PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00897879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-341980/32.
N-PSDB; ACD23938.

New secreted and transmembrane PRO nucleic acids, for treating
inflammation, organ failure, atherosclerosis, cardiac injury,
infertility, birth defects, premature aging, acquired immunodeficiency
syndrome (AIDS), or cancer.

Claim 12; Fig 172; 660pp; English.

The invention describes an isolated nucleic acid (I) comprising, or which
has 80 % sequence identity to, or the full-length coding sequence of, one
of 275 nucleotide sequences, and which encodes a corresponding
polypeptide selected from 275 amino acid sequences, where all sequences
are given in the specification. The polypeptide encoded by (I) is used to
detect PRO polypeptides, link a bioactive molecule to a cell expressing a
PRO polypeptide, modulate a biological activity of a cell, stimulate the
release of tumour necrosis factor (TNF)-alpha from human blood, modulate

CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit
CC the proliferation or differentiation of cells or gene expression,
CC stimulate the release of proteoglycans, stimulate the release of cytokine
CC from peripheral blood mononuclear cells, inhibit the binding of A-peptide
CC to factor VIIA, or detect the presence of tumour in a mammal. The nucleic
CC acid and polypeptide encoded by it, are useful for treating inflammatory
CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,
CC birth defects, premature aging, acquired immunodeficiency syndrome
CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as
CC hybridisation probes, in chromosome and gene mapping, and in generating
CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,
CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.
CC This is the amino acid sequence of a novel human secreted and
CC transmembrane PRO polypeptide
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred.No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db |||||
1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db |||||
61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db |||||
121 QNEISDR 127

RESULT 9

ABU80955
ID ABU80955 standard; protein; 182 AA.

XX AC ABU80955;

XX DT 23-JUN-2003 (first entry)

XX DE Human PRO polypeptide #86.

XX KW Human; PRO polypeptide; secreted and transmembrane protein;
KW anti-PRO antibody; diagnostic assay; gene expression; diabetes;
KW bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
KW sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
KW hearing loss; coagulation disorder; stroke; heart attack; cardiac;
KW antidiabetic; anorectic; vulnery; antiarthritic; osteopathic;
KW antirheumatic; auditory; cerebroprotective; angiogenic.

XX OS Homo sapiens.

XX PN US2003004311-A1.

XX PD 02-JAN-2003.

XX PF 19-DEC-2001; 2001US-00028072.

XX PR 18-JUN-1997; 97US-0049911P.

PR 26-AUG-1997; 97US-0056974P.

PR 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 19-SEP-1997; 97US-0059352P.

PR 19-SEP-1997; 97US-0059588P.

PR 24-SEP-1997; 97US-0059836P.

PR 17-OCT-1997; 97US-0062250P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.
PR 17-OCT-1997; 97US-0063755P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063082P.
PR 24-OCT-1997; 97US-0063127P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063561P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063733P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 11-DEC-1997; 97US-0069212P.
PR 11-DEC-1997; 97US-0069278P.
PR 11-DEC-1997; 97US-0069334P.
PR 16-DEC-1997; 97US-0069694P.
PR 23-JAN-1998; 98US-0072320P.
PR 04-FEB-1998; 98US-0073612P.
PR 09-FEB-1998; 98US-0074086P.
PR 09-FEB-1998; 98US-0074092P.
PR 12-MAR-1998; 98US-0077791P.
PR 20-MAR-1998; 98US-0078910P.
PR 25-MAR-1998; 98US-0079294P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079728P.
PR 31-MAR-1998; 98US-0080165P.
PR 12-JUN-1998; 98US-008012456.
PR 14-JUL-1998; 98US-008014552.
PR 28-AUG-1998; 98US-008017888.
PR 10-SEP-1998; 98US-008018824.
PR 14-SEP-1998; 98US-008019093.
PR 14-SEP-1998; 98US-008019094.
PR 14-SEP-1998; 98US-008019177.
PR 16-SEP-1998; 98US-008019330.
PR 17-SEP-1998; 98US-008019437.
PR 07-OCT-1998; 98US-008021141.
PR 29-OCT-1998; 98US-008022991.
PR 29-OCT-1998; 98US-008022992.
PR 20-NOV-1998; 98US-008024855.
PR 01-DEC-1998; 98US-008025108.
PR 05-JAN-1999; 99US-0000106.
PR 08-MAR-1999; 99US-00005028.
PR 10-MAR-1999; 99US-00005190.
PR 20-APR-1999; 99US-00008615.
PR 14-MAY-1999; 99US-00010733.
PR 02-JUN-1999; 99US-00012252.
PR 01-SEP-1999; 99US-00020111.
PR 08-SEP-1999; 99US-00020594.
PR 13-SEP-1999; 99US-00020944.
PR 15-SEP-1999; 99US-00021030.
PR 15-SEP-1999; 99US-00021547.
PR 05-OCT-1999; 99US-00023089.
PR 29-NOV-1999; 99US-00028214.
PR 30-NOV-1999; 99US-00028313.
PR 30-NOV-1999; 99US-00028409.
PR 01-DEC-1999; 99US-00028301.
PR 01-DEC-1999; 99US-00028634.
PR 02-DEC-1999; 99US-00028551.
PR 02-DEC-1999; 99US-00028564.
PR 02-DEC-1999; 99US-00028565.
PR 16-DEC-1999; 99US-00030095.
PR 20-DEC-1999; 99US-00030911.

PR 20-DEC-1999; 99US-00030999.
PR 30-DEC-1999; 99US-00031243.
PR 30-DEC-1999; 99US-00031274.
PR 05-JAN-2000; 2000US-0000219.
PR 06-JAN-2000; 2000US-0000277.
PR 06-JAN-2000; 2000US-0000376.
PR 11-FEB-2000; 2000US-00003565.
PR 18-FEB-2000; 2000US-00004341.
PR 18-FEB-2000; 2000US-00004342.
PR 22-FEB-2000; 2000US-00004414.
PR 24-FEB-2000; 2000US-00004914.
PR 24-FEB-2000; 2000US-00005004.
PR 01-MAR-2000; 2000US-00005601.
PR 02-MAR-2000; 2000US-00005746.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR MPI; 2003-352836/33.
DR N-PSDB; ACA67079.
XX
PT New isolated PRO polypeptide useful for treating diabetes, rheumatoid
PT arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
PT heart attack.
XX
PS Claim 12; Fig 172; 643pp; English.
XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides and polynucleotides are useful for preparing a medicament
CC useful in the treatment of diabetes, bone and/or cartilage disorders
CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
CC hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
CC assays for PRO, by detecting its expression in specific cells, tissues or
CC serum, and for affinity purification of PRO from recombinant cell culture
CC or natural sources. ABU80870-ABU81144 represent the human PRO
CC polypeptides of the invention. Note: The sequence data for this patent
CC was obtained in electronic format directly from the USPTO web site at
CC seqdata.uspto.gov/psipsDIDENTry.html
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVFPQVTSYNGRTFLGLDKC 60
Db |||||
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVFPQVTSYNGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIMRPVEIFRLVSKY 120
Db |||||
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIMRPVEIFRLVSKY 120
Db |||||
QY 121 QNEISDR 127
Db |||||
QY 121 QNEISDR 127

RESULT 10
ABU66655
ID ABU66655 standard; protein; 182 AA.
XX
AC ABU66655;
XX
DT 23-MAY-2003 (first entry)
XX
DE Human PRO polypeptide #86.

XX Human; PRO polypeptide; secreted and transmembrane protein;
KW tumour necrosis factor-alpha; TNF-alpha; blood; proliferation;
KW differentiation; chondrocyte; tumour; genetic disorder; cytostatic.
XX
OS Homo sapiens.
XX US2003036180-A1.
XX
PD 20-FEB-2003.
XX
PF 09-MAY-2002; 2002US-00143114.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US030219.
PR 06-JAN-2000; 2000WO-US030277.
PR 06-JAN-2000; 2000WO-US030376.
PR 11-FEB-2000; 2000WO-US030365.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.

PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-332040/31.
N-PSDB; ACA03688.

New secreted and transmembrane PRO nucleic acids, useful for gene therapy, in chromosome and gene mapping, as chromosome markers, in tissue typing, and in chromosome identification.

Claim 12; Fig 172; 660pp; English.

The present invention relates to the isolation of novel human PRO polypeptides, and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, and for biological activities of cells expressing PRO polypeptides, and for identifying agonists or antagonists. The PRO polypeptides are useful for stimulating the release of tumour necrosis factor (TNF)-alpha from human blood, for stimulating the proliferation or differentiation of chondrocytes, and detecting the presence of tumours. The polynucleotide sequences encoding PRO polypeptides are useful as hybridisation probes, in chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of PRO polypeptides, for generating transgenic animals or knockout animals, for the genetic analysis of individuals with genetic disorders, and in gene therapy. ABU66570-ABU66844 represent the human PRO polypeptides of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the USPTO web site at seqdata.uspto.gov/psipdIDEntry.html

```
XX      SQ      Sequence 182 AA;
Query Match      69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  MEPQLGPEAAALRPGWLALLLWVSALSCSPSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
      |||
Db      1  MEPQLGPEAAALRPGWLALLLWVSALSCSPSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Qy      61  NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLWSKY 120
      |||
Db      61  NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLWSKY 120

Qy      121  QNEISDR 127
      |||
Db      121  QNEISDR 127

RESULT 11
ABU59736
ID      ABU59736 standard; protein; 182 AA.
XX
AC      ABU59736;
XX
DT      13-MAY-2003 (first entry)
XX
DE      Novel secreted and transmembrane protein PRO3743.
XX
KW      Human; PRQ; hypertrophy of neonatal heart; angiogenesis; wound healing;
KW      cardiac insufficiency disorder; cancer; tumour; immune response;
KW      adrenal cortical capillary endothelial growth; c-fos induction;
KW      vascular endothelial growth factor inhibition; VEGF inhibition;
KW      endothelial cell growth inhibitor; T-lymphocytes stimulation;
KW      retinal neurons cell survival; rod photoreceptor cell survival;
KW      retinal disorder; retinitis pigmentosa; kidney disorder;
KW      mammalian kidney mesangial cell proliferation; Berger disease;
KW      dermatitis; herpeticiformis; Crohn's disease; chondrocyte proliferation;
KW      chondrocyte redifferentiation; sports injury; arthritis.
XX
OS      Homo sapiens.
XX
PN      US2003017563-A1.
XX
PD      23-JAN-2003.
XX
PF      07-MAY-2002; 2002US-00140808.
XX
PR      31-MAR-1997; 97WO-US005230.
PR      12-JUN-1998; 98WO-US012456.
PR      14-JUL-1998; 98WO-US014552.
PR      28-AUG-1998; 98WO-US017888.
PR      10-SEP-1998; 98WO-US018824.
PR      14-SEP-1998; 98WO-US019093.
PR      14-SEP-1998; 98WO-US019094.
PR      14-SEP-1998; 98WO-US019177.
PR      16-SEP-1998; 98WO-US019330.
PR      17-SEP-1998; 98WO-US019437.
PR      07-OCT-1998; 98WO-US021141.
PR      29-OCT-1998; 98WO-US022991.
PR      29-OCT-1998; 98WO-US022992.
PR      20-NOV-1998; 98WO-US024855.
PR      01-DEC-1998; 98WO-US025108.
PR      05-JAN-1999; 99WO-US000106.
PR      08-MAR-1999; 99WO-US005028.
PR      10-MAR-1999; 99WO-US005190.
PR      20-APR-1999; 99WO-US008615.
PR      14-MAY-1999; 99WO-US010733.
PR      02-JUN-1999; 99WO-US012252.
PR      01-SEP-1999; 99WO-US020111.
PR      08-SEP-1999; 99WO-US020594.
PR      13-SEP-1999; 99WO-US020944.

PR      15-SEP-1999; 99WO-US021090.
PR      15-SEP-1999; 99WO-US021547.
PR      05-OCT-1999; 99WO-US023089.
PR      29-NOV-1999; 99WO-US028214.
PR      30-NOV-1999; 99WO-US028313.
PR      30-NOV-1999; 99WO-US028409.
PR      01-DEC-1999; 99WO-US028301.
PR      01-DEC-1999; 99WO-US028634.
PR      02-DEC-1999; 99WO-US028551.
PR      02-DEC-1999; 99WO-US028564.
PR      02-DEC-1999; 99WO-US028565.
PR      16-DEC-1999; 99WO-US030095.
PR      20-DEC-1999; 99WO-US030911.
PR      20-DEC-1999; 99WO-US030999.
PR      22-DEC-1999; 99WO-US030720.
PR      30-DEC-1999; 99WO-US031243.
PR      30-DEC-1999; 99WO-US031274.
PR      05-JAN-2000; 2000WO-US000219.
PR      06-JAN-2000; 2000WO-US000277.
PR      06-JAN-2000; 2000WO-US000376.
PR      11-FEB-2000; 2000WO-US003565.
PR      18-FEB-2000; 2000WO-US004341.
PR      18-FEB-2000; 2000WO-US004342.
PR      22-FEB-2000; 2000WO-US004414.
PR      24-FEB-2000; 2000WO-US004914.
PR      24-FEB-2000; 2000WO-US005004.
PR      01-MAR-2000; 2000WO-US005601.
PR      02-MAR-2000; 2000WO-US005746.
PR      02-MAR-2000; 2000WO-US005841.
PR      10-MAR-2000; 2000WO-US006319.
PR      15-MAR-2000; 2000WO-US006884.
PR      20-MAR-2000; 2000WO-US007377.
PR      21-MAR-2000; 2000WO-US007532.
PR      30-MAR-2000; 2000WO-US008439.
PR      17-MAY-2000; 2000WO-US013705.
PR      22-MAY-2000; 2000WO-US014042.
PR      30-MAY-2000; 2000WO-US014941.
PR      02-JUN-2000; 2000WO-US015264.
PR      28-JUL-2000; 2000WO-US020710.
PR      11-AUG-2000; 2000WO-US022031.
PR      23-AUG-2000; 2000WO-US023522.
PR      24-AUG-2000; 2000WO-US023328.
PR      08-NOV-2000; 2000WO-US030952.
PR      10-NOV-2000; 2000WO-US030873.
PR      01-DEC-2000; 2000WO-US032678.
PR      20-DEC-2000; 2000US-00747259.
PR      20-DEC-2000; 2000WO-US034956.
PR      28-FEB-2001; 2001US-00796498.
PR      28-FEB-2001; 2001WO-US006520.
PR      01-MAR-2001; 2001WO-US006666.
PR      09-MAR-2001; 2001US-00802706.
PR      14-MAR-2001; 2001US-00808689.
PR      22-MAR-2001; 2001US-00816744.
PR      05-APR-2001; 2001US-00828366.
PR      10-MAY-2001; 2001US-00854208.
PR      10-MAY-2001; 2001US-00854280.
PR      18-MAY-2001; 2001US-00860216.
PR      25-MAY-2001; 2001US-00866028.
PR      25-MAY-2001; 2001US-00866034.
PR      25-MAY-2001; 2001WO-US017092.
PR      01-JUN-2001; 2001US-00872035.
PR      01-JUN-2001; 2001WO-US017800.
PR      05-JUN-2001; 2001US-00874503.
PR      14-JUN-2001; 2001US-00882636.
PR      19-JUN-2001; 2001US-00886342.
PR      20-JUN-2001; 2001WO-US019692.
PR      21-JUN-2001; 2001US-00887879.
PR      22-JUN-2001; 2001WO-US020116.
PR      29-JUN-2001; 2001WO-US021066.
PR      09-JUL-2001; 2001WO-US021735.
PR      18-JUL-2001; 2001US-00908827.
PR      06-AUG-2001; 2001US-00924419.
PR      09-AUG-2001; 2001US-00927796.
```

PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-148238/14.
DR N-PSDB; ABX89226.
XX
PT Two hundred and seventy five nucleic acids encoding PRO polypeptides,
PT useful for treating pericyte-associated tumors, diabetes and various bone
PT and/or cartilage disorders, e.g. arthritis.
XX
PS Claim 12; Fig 172; 659pp; English.
XX
CC The invention describes an isolated human PRO polypeptide. The PRO
CC polypeptides are useful in detecting PRO polypeptides in a sample, in
CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and
CC in modulating at least one biological activity of a cell expressing a PRO
CC polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus
CC useful for treating cardiac insufficiency disorders. PRO1154 and PRO1186
CC stimulate adrenal cortical capillary endothelial growth, and PRO536,
CC PRO943, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1126,
CC PRO1360 and PRO1387 induce c-fos in endothelial cells, and are thus
CC useful for treating conditions or disorders where angiogenesis would be
CC beneficial, e.g. wound healing and antagonism of this polypeptide are
CC useful for treating cancerous tumours. PRO912 inhibits vascular
CC endothelial growth factor (VEGF) stimulated proliferation of endothelial
CC cells and is thus useful for inhibiting endothelial cell growth in
CC mammals which would be beneficial in inhibiting tumour growth. PRO826,
CC PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of
CC stimulated T-lymphocytes and are therapeutically useful for enhancing
CC immune response. PRO828, PRO826, PRO1068 or PRO1132 enhance survival of
CC retinal neurons cells (PRO1132 is also enhances survival/proliferation of
CC rod photoreceptor cells) and therefore are useful for treating retinal
CC disorders of injuries, e.g. retinitis pigmentosa, AMD. PRO819, PRO813
CC and PRO11066 induce proliferation of mammalian kidney mesangial cells,
CC and therefore are useful for treating kidney disorders associated with
CC decreased mesangial cell function such as Berger disease or other
CC nephropathies associated with dermatitis, herpetiformis or Crohn's
CC disease. PRO1310, PRO844, PRO1312, PRO1192 and PRO1387 induce the
CC proliferation and/or redifferentiation of chondrocytes in culture and are
CC thus useful for treating sports injuries, and arthritis. This is the
CC amino acid sequence of a novel human PRO protein
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-139;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db |||||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKPFKEEIRSDNWLASHLGLPDLSSLYFANYSDSKINRPVEIFRLVSKY 120
Db |||||
Db 61 NACIGTSICKKPFKEEIRSDNWLASHLGLPDLSSLYFANYSDSKINRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db |||||
Db 121 QNEISDR 127

RESULT 12
ABO24926
ID ABO24926 standard; protein; 182 AA.
XX
AC ABO24926;
XX

DT 05-SEP-2003 (first entry)
XX Human secreted/transmembrane protein (PRO) #86.
DE
XX Human; PRO; secreted protein; transmembrane protein; tumour; cytostatic;
KW gene therapy; tumour necrosis factor-alpha; TNF-alpha; blood;
KW proteoglycan; cartilage; cytokine; peripheral blood mononuclear cell;
KW PWC; glucose uptake; FFA; skeletal muscle cell; adipocyte cell;
KW chondrocyte cell proliferation; chondrocyte cell differentiation;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell; A-peptide; factor VIIA.
XX
OS Homo sapiens.
XX
PN US2003036179-A1.
XX
PD 20-FEB-2003.
XX
PF 10-MAY-2002; 2002US-00142431.
XX
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US00106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 28-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US0063119.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00838689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 29-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-466355/44.
DR N-ESDB; ACD41880.

XX New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.

XX Claim 12; Fig 172; 659pp; English.

XX The invention relates to an isolated nucleic acid comprising at least 80%
CC sequence identity to a PRO (secreted and transmembrane protein) cDNA
CC comprising a nucleic acid (a) encoding a PRO polypeptide, or its
CC extracellular domain (with or without its associated signal peptide),
CC which comprises any of the 275 120-850 residue amino acid sequences,
CC given in the specification; (b) comprising any of the 275 300-3500
CC nucleotide sequences, given in the specification; or (c) comprising the
CC full-length coding sequence of the nucleotide sequences given in the
CC specification, or of the DNA deposited under any of the American Type
CC Culture Collection (ATCC) Accession Numbers listed in the specification.
CC Also included are a vector comprising the novel nucleic acid, a host cell

CC comprising the vector, producing a PRO polypeptide, the isolated PRO
CC polypeptides detailed above, a chimaeric molecule comprising the PRO
CC polypeptide of fused to a heterologous amino acid sequence, an anti-PRO
CC antibody, detecting a PRO polypeptide in a sample suspected of containing
CC the PRO polypeptide, linking a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulating at least one biological activity of a cell
CC expressing a PRO polypeptide, stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, (or proteoglycans from
CC cartilage or cytokine from peripheral blood mononuclear cells (PBMC)),
CC modulating the uptake of glucose or FFA by skeletal muscle cells or
CC adipocyte cells, stimulating the proliferation or differentiation of
CC chondrocyte cells (or proliferation of or gene expression in pericyte
CC cells), stimulating the proliferation of inner ear utricular supporting
CC cells (or of T-lymphocyte cells, or of endothelial cells), inhibiting the
CC binding of A-peptide to factor VIIA, or differentiation of adipocyte
CC cells, detecting the presence of a tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences given
CC in the specification. The polynucleotide is useful in molecular biology,
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC in generating antisense RNA and DNA, and in gene therapy. The
CC polynucleotide may also be used in preparing PRO polypeptides by
CC recombinant techniques, and in generating either transgenic animals or
CC knock-out animals which, in turn, are useful in the development and
CC screening of therapeutically useful reagents. The PRO polypeptide or the
CC antibody is used in preparing a medicament for treating a condition
CC responsive to the polypeptide or antibody, such as tumours, and in
CC various diagnostic assays. The present sequence represents a PRO
CC polypeptide
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-103;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVRTSYNFGRTFLGDKC 60
Db |||||
1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVRTSYNFGRTFLGDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSILSYPNYSDSKIWPRVEIFRLVSKY 120
Db |||||
61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSILSYPNYSDSKIWPRVEIFRLVSKY 120
QY 121 QNEISDR 127
Db |||||
121 QNEISDR 127

RESULT 13

ABU66931
ID ABU66931 standard; protein; 182 AA.

XX AC ABU66931;

XX XX 27-MAY-2003 (first entry)

XX DE Human secreted/transmembrane, PRO, protein SEQ ID 172.

XX KW Human; secreted protein; transmembrane protein; PRO;
KW inflammatory disease; organ failure; atherosclerosis; cardiac injury;
KW infertility; birth defects; premature aging; AIDS; biosensor;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW bioreactor; tumour.

XX OS Homo sapiens.

XX PN US2003032155-A1.

XX PD 13-FEB-2003.

XX PF 03-MAY-2002; 2002US-00137865.

XX PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR

PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX

(GETH) GENENTECH INC.

PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX

DR WPI; 2003-331925/31.
DR N-PSDB; ACA04109.

XX New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.

XX Claim 12; Fig 172; 659pp; English.

XX The invention relates to an isolated nucleic acid comprising, or which is
CC at least 80% identical to, or the full-length coding sequence of, any of
CC the 275 nucleotide sequences, encoding the corresponding PRO polypeptide
CC (one of 275 secreted or transmembrane proteins). The nucleic acid further
CC comprises the full-length coding sequence of the DNA deposited under
CC American Type Culture Collection (ATCC) accession number in a list given
CC in the specification. Also included are vectors and host cells for
CC producing PRO proteins, PRO fusion proteins, anti-PRO antibodies, PRO
CC extracellular domains and mature sequences, methods of detecting PRO
CC proteins, methods for stimulating the release of TNF-alpha (tumour
CC necrosis factor alpha) from human blood, (and the proliferation of
CC differentiation of chondrocyte cells, the proliferation of, or gene
CC expression in pericyte cells, the release or proteoglycans from
CC cartilage, proliferation of inner ear utricular supporting cells, the
CC proliferation of T-lymphocyte cells, the release of a cytokine from
CC peripheral blood mononuclear cells (PBMC), or the proliferation of
CC endothelial cells), a method for modulating the uptake of glucose or free
CC fatty acid (FFA) by skeletal muscle cells, a method for inhibiting the
CC binding of A-peptide to factor VIIA, or the differentiation of adipocyte
CC cells, a method for detecting the presence of a tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences cited
CC above. The nucleic acids and polypeptides are useful for treating
CC inflammatory diseases, organ failure, atherosclerosis, cardiac injury,
CC infertility, birth defects, premature aging, AIDS (acquired
CC immunodeficiency syndrome), cancer, or diabetic complications. The
CC nucleic acids are useful as hybridisation probes, in chromosome and gene
CC mapping, and in generating antisense RNA or DNA. The polypeptides are
CC useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both
CC are useful in tissue typing. The present sequence represents a PRO
CC protein of the invention

PA (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-584997/55.

DR N-PSDB; ADA4569C.

XX Novel secreted and transmembrane polypeptide for modulating biological

PT activity of cell expressing the polypeptide, identifying agonists or

PT antagonists of polypeptide, and as molecular weight markers.

XX Claim 12; Fig 172; 659pp; English.

XX The invention describes 305 nucleic acids encoding PRO (secreted and

CC transmembrane) polypeptides (I). (I) is useful for stimulating the

CC release of TNF-alpha from human blood, for modulating the uptake of

CC glucose or FFA by skeletal muscle cells or adipocyte cells, for

CC stimulating the proliferation or differentiation of chondrocyte cells,

CC for stimulating the proliferation of or gene expression in pericyte

CC cells, for stimulating the release of proteoglycans from cartilage, for

CC stimulating the proliferation of inner ear utricular supporting cells,

CC for stimulating the proliferation of T-lymphocyte cells, for stimulating

CC the release of a cytokine from PBMC cells, for inhibiting the binding of

CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte

CC cells, for stimulating proliferation of endothelial cells, for detecting

CC the presence of tumour in a mammal. The tumour is lung, colon, breast,

CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes

CC are useful for isolating genomic and cDNA nucleotide sequences or

CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful

CC in assays to identify other proteins or molecules involved in binding

CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome

CC and gene mapping, in generation of antisense RNA and DNA, in the

CC preparation of PRO polypeptide, for generating transgenic animals or

CC knockout animals which in turn are useful in the development and

CC screening of therapeutically useful reagents, in gene therapy, for

CC chromosome identification, as chromosome marker, and for generating

CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.

CC detecting its expression in specific cells, tissues or serum, and for

CC affinity purification of PRO from recombinant cell culture or natural

CC sources. (I) and (II) are useful for tissue typing. This is the amino

CC acid sequence of a novel human secreted and transmembrane PRO

XX polypeptide.

SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 4e-109;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSSLPQVRTSYNFGRTFLGLDKC 60

Db |||||

QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120

Db |||||

QY 121 QNEISDR 127

Db |||||

121 QNEISDR 127

RESULT 15

ADA76122

ID ADA76122 standard; protein; 182 AA.

XX

AC ADA76122;

XX

DT 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;

KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;

KW liver; microvascular endothelial cell; glucose; FFA;

KW skeletal muscle cell; adipocyte cell; pericyte cell;

KW inner ear utricular supporting cell; T-lymphocyte cell;

KW endothelial cell tube formation; bone disorder; cartilage disorder;

KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

KW immune system cell infiltration.

XX Homo sapiens.

XX US2003073212-A1.

PN 17-APR-2003.

XX 16-APR-2002; 2002US-00123903.

XX 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98WO-US019437.

PR 07-OCT-1998; 98WO-US021141.

PR 29-OCT-1998; 98WO-US022992.

PR 20-NOV-1998; 98WO-US024855.

PR 01-DEC-1998; 98WO-US025108.

PR 05-JAN-1999; 99WO-US000106.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 20-APR-1999; 99WO-US008615.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.

PR 05-OCT-1999; 99WO-US023089.

PR 29-NOV-1999; 99WO-US028214.

PR 30-NOV-1999; 99WO-US028313.

PR 30-NOV-1999; 99WO-US028409.

PR 01-DEC-1999; 99WO-US028301.

PR 01-DEC-1999; 99WO-US028634.

PR 02-DEC-1999; 99WO-US028551.

PR 02-DEC-1999; 99WO-US028564.

PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030095.

PR 20-DEC-1999; 99WO-US030911.

PR 20-DEC-1999; 99WO-US030999.

PR 22-DEC-1999; 99WO-US030720.

PR 30-DEC-1999; 99WO-US031243.

PR 30-DEC-1999; 99WO-US031274.

PR 05-JAN-2000; 2000WO-US000219.

PR 06-JAN-2000; 2000WO-US000277.

PR 06-JAN-2000; 2000WO-US000376.

PR 11-FEB-2000; 2000WO-US003565.

PR 18-FEB-2000; 2000WO-US004341.

PR 18-FEB-2000; 2000WO-US004342.

PR 22-FEB-2000; 2000WO-US004414.

PR 24-FEB-2000; 2000WO-US004914.

PR 24-FEB-2000; 2000WO-US005004.

PR 01-MAR-2000; 2000WO-US005601.

PR 02-MAR-2000; 2000WO-US005746.

PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

{GETH } GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-687639/65.
DR N-PSDB; ADA76121.

XX New isolated nucleic acid encoding a secreted and transmembrane
PT polypeptide, designated e.g. PRO114 or PRO4978, useful in chromosome and
PT gene mapping, in generating antisense RNA and DNA, and in gene therapy.

XX Claim 12; Fig 172; 659pp; English.

PS The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also

CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWRFVEIFRLVSKY 120
Db |||||
QY 121 QNEISDR 127
Db |||||

RESULT 16

ADA18772
ID ADA18772 standard; protein; 182 AA.

XX ADA18772;

XX 20-NOV-2003 (first entry)

DE Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; lung;
KW colon; breast; prostate; rectum; cervix; liver; tumour; cancer;
KW glucose uptake; FFA; adipocyte cell; pericyte cell; proteoglycan;
KW cartilage; inner ear utricular supporting cell; cytokine; A-peptide;
KW factor VIIA; endothelial cell.

XX Homo sapiens.

XX US2003054517-A1.

XX 20-MAR-2003.

XX 08-MAY-2002; 2002US-00141755.

XX 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.

PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-521854/49.
N-PSDB; ADA18771.

New PRO nucleic acid, useful for preparing a composition for treating
e.g., tumors.

Claim 12; Fig 172; 660pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. lung, colon, breast, prostate, rectal, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for modulating the uptake of glucose or FFA by adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the release of cytokines from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells and for stimulating the proliferation of endothelial cells. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.

Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pred.No. 4e-109;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTGLDKC 60

DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTGLDKC 60

QY	61	NACIGTSICKEEKEIRSDNWLASHILGLPPDSLLSY2PANYSDDSKIWRPVEIFRLVSKY	120
QY	61	NACIGTSICKEEKEIRSDNWLASHILGLPPDSLLSY2PANYSDDSKIWRPVEIFRLVSKY	120

Qy	121	QNEISDR	127
Db	121	QNEISDR	127

RESULT 17

ADA61395
ID ADA61395 standard; protein; 182 AA.

AC
ADA613951

DT 20-NOV-2003 (first entry)

DE
Homo sapiens.

KW	Human; secreted and transmembrane protein; PRO;
KW	Tumour necrosis factor alpha release; TNF-alpha release;
KW	glucose uptake modulator; FFA uptake modulator;
KW	cell proliferation stimulator; cell differentiation stimulator;
KW	cell differentiation inhibitor; cytokine release stimulator; tumour;
KW	lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW	cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW	gene therapy; chromosome identification; chromosome marker

OS Novel.
OS human.
OS secreted.
OS and.
OS transmembrane.
OS protein.
OS PRC3743.

PN US2003049816-A1.

13-MAR-2003.

15-APR-2002; 2002US-00123262.

PR	31-MAR-1997;	97WO-US005230.
PR	12-JUN-1998;	98WO-US012456.
PR	14-JUL-1998;	98WO-US014552.
PR	28-AUG-1998;	98WO-US017888.
PR	10-SEP-1998;	98WO-US018824.
PR	14-SEP-1998;	98WO-US019093.
PR	14-SEP-1998;	98WO-US019094.
PR	14-SEP-1998;	98WO-US019177.
PR	16-SEP-1998;	98WO-US019330.
PR	17-SEP-1998;	98WO-US019437.
PR	07-OCT-1998;	98WO-US021141.
PR	29-OCT-1998;	98WO-US022991.
PR	29-OCT-1998;	98WO-US022992.
PR	20-NOV-1998;	98WO-US024855.
PR	01-DEC-1998;	98WO-US025108.
PR	05-JAN-1999;	99WO-US000106.
PR	08-MAR-1999;	99WO-US0005028.
PR	10-MAR-1999;	99WO-US005190.
PR	20-APR-1999;	99WO-US008615.
PR	14-MAY-1999;	99WO-US010733.
PR	02-JUN-1999;	99WO-US012252.
PR	01-SEP-1999;	99WO-US020111.
PR	08-SEP-1999;	99WO-US020594.
PR	13-SEP-1999;	99WO-US020944.
PR	15-SEP-1999;	99WO-US021090.
PR	15-SEP-1999;	99WO-US021547.
PR	05-OCT-1999;	99WO-US023089.
PR	29-NOV-1999;	99WO-US028214.
PR	30-NOV-1999;	99WO-US028313.
PR	30-NOV-1999;	99WO-US028409.
PR	01-DEC-1999;	99WO-US028301.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PR	31-DEC-1999;	99WO-US028634
PR	32-DEC-1999;	99WO-US028551
PR	32-DEC-1999;	99WO-US028564
PR	32-DEC-1999;	99WO-US028565
PR	16-DEC-1999;	99WO-US033095
PR	20-DEC-1999;	99WO-US033091
PR	20-DEC-1999;	99WO-US033099
PR	22-DEC-1999;	99WO-US033070
PR	30-DEC-1999;	99WO-US031243
PR	30-DEC-1999;	99WO-US031274
PR	05-JAN-2000;	2000WO-US000219
PR	06-JAN-2000;	2000WO-US000277
PR	06-JAN-2000;	2000WO-US000376
PR	11-FEB-2000;	2000WO-US003565
PR	18-FEB-2000;	2000WO-US004341
PR	18-FEB-2000;	2000WO-US004342
PR	22-FEB-2000;	2000WO-US004414
PR	24-FEB-2000;	2000WO-US004914
PR	24-FEB-2000;	2000WO-US005004
PR	01-MAR-2000;	2000WO-US005601
PR	02-MAR-2000;	2000WO-US005746
PR	02-MAR-2000;	2000WO-US005841
PR	10-MAR-2000;	2000WO-US006319
PR	15-MAR-2000;	2000WO-US006884
PR	20-MAR-2000;	2000WO-US007377
PR	21-MAR-2000;	2000WO-US007532
PR	30-MAR-2000;	2000WO-US008439
PR	17-MAY-2000;	2000WO-US013705
PR	22-MAY-2000;	2000WO-US014042
PR	30-MAY-2000;	2000WO-US014941
PR	32-JUN-2000;	2000WO-US015264
PR	28-JUL-2000;	2000WO-US020710
PR	11-AUG-2000;	2000WO-US022031
PR	23-AUG-2000;	2000WO-US023522
PR	24-AUG-2000;	2000WO-US023328
PR	08-NOV-2000;	2000WO-US030952
PR	10-NOV-2000;	2000WO-US030873
PR	01-DEC-2000;	2000WO-US032678
PR	20-DEC-2000;	2000US-00747259
PR	20-DEC-2000;	2000WO-US034956
PR	28-FEB-2001;	2001US-00796498
PR	28-FEB-2001;	2001WO-US006520
PR	01-MAR-2001;	2001WO-US006666
PR	09-MAR-2001;	2001US-00802706
PR	14-MAR-2001;	2001US-00808689
PR	22-MAR-2001;	2001US-00816744
PR	05-APR-2001;	2001US-00828366
PR	10-MAY-2001;	2001US-00854208
PR	10-MAY-2001;	2001US-00854280
PR	18-MAY-2001;	2001US-00860216
PR	25-MAY-2001;	2001US-00866028
PR	25-MAY-2001;	2001US-00866034
PR	25-MAY-2001;	2001WO-US017092
PR	01-JUN-2001;	2001US-00872035
PR	01-JUN-2001;	2001WO-US017800
PR	05-JUN-2001;	2001US-00874503
PR	14-JUN-2001;	2001US-00882636
PR	19-JUN-2001;	2001US-00886342
PR	20-JUN-2001;	2001WO-US019692
PR	21-JUN-2001;	2001US-00887879
PR	22-JUN-2001;	2001WO-US020116
PR	29-JUN-2001;	2001WO-US021066
PR	09-JUL-2001;	2001WO-US021735
PR	18-JUL-2001;	2001US-00908827
PR	06-AUG-2001;	2001US-00924419
PR	09-AUG-2001;	2001US-00927796
PR	16-AUG-2001;	2001US-00931836
PR	19-DEC-2001;	2001US-00028072

PA

XX

Id

II

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-695892/66.
DR N-PSDB; ADA61394.
XX
PT New PRO nucleic acid and encode polypeptides, are useful for
PT manufacturing a medicament for diagnosing or treating cancer.
XX
PS Claim 12; Fig 172; 660pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-103;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||
1 MEPQLGPEAAALRPGWLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIRWPVEIFRLVSKY 120
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||
61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIRWPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db |||||||
121 QNEISDR 127

RESULT 18
ADB19180
ID ADB19180 standard; protein; 182 AA.
XX
AC ADB19180;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;

KW cell differentiation inhibitor; cytokine releas.
XX Homo sapiens.
OS
XX
PN US2003068796-A1.
XX
PD 10-APR-2003.
XX
PF 15-APR-2002; 2002US-00123261.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.

```
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH ) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-695927/66.
DR N-PSDB; ADB19179.
XX
PT Novel secreted and transmembrane PRO polypeptides useful for stimulating
PT the release of tumor necrosis factor alpha and detecting the presence of
PT a tumor in a mammal.
XX
PS Claim 12; Fig 172; 660pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyt
XX
SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVPQVQRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVPQVQRTSYNFGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWRPVEIFRLVSKY 120
Qy 121 QNEISDR 127
Db 121 QNEISDR 127
```

```
Db 121 QNEISDR 127
RESULT 19
ADB27721
ID ADB27721 standard; protein; 182 AA.
XX
AC ADB27721;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082704-A1.
XX
PD 01-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131819.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH ) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-765415/72.
DR N-PSDB; ADB27720.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
```


CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 20

ADA86200
ID ADA86200 standard; protein; 182 AA.

XX AC ADA86200;

DT 20-NOV-2003 (first entry)

XX DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX OS Homo sapiens.

XX FN US2003082711-A1.

XX PD 01-MAY-2003.

XX PF 16-MAY-2002; 2002US-00147508.

XX PR 02-JUL-1998; 98US-0091519P.

XX PR 02-JUN-1999; 99WO-US012252.

XX PR 07-JUL-1999; 99US-0143048P.

XX PR 25-AUG-1999; 99US-00380137.

XX PR 30-MAR-2000; 2000WO-US008439.

XX PR 01-DEC-2000; 2000WO-US032678.

XX PR 19-DEC-2001; 2001US-00028072.

XX PA (GETH) GENENTECH INC.

XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

XX PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

XX PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;

XX PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.

XX PS Claim 12; Fig 172; 637pp; English.

XX CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 21

ADB15764
ID ADB15764 standard; protein; 182 AA.

XX AC ADB15764;

XX DT 20-NOV-2003 (first entry)

XX DE Human PRO polypeptide #86.

XX KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX US2003087350-A1.
PN
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127821.
XX
PR 04-AUG-1998; 98US-0095301P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786941/74.
DR N-PSDB; ADB15763.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumor necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumor in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumors). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumors, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred.No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Db ||||| 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY ||||| 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSYPANYSDDSKIWRPVEIFRLVSKY 120
Db ||||| 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSYPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 22
ADA47550
ID ADA47550 standard; protein; 182 AA.
XX
AC ADA47550;
XX
DT 20-NOV-2003 (first entry)
XX Human PRO polypeptide #86.
DE Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003073215-A1.
XX
PD 17-APR-2003.
XX
PF 07-MAY-2002; 2002US-00140925.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.

PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-FEB-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 28-FEB-2001; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 01-JUN-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-644801/61.
DR N-PSDB; ADA47549.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, detecting the presence of tumor in a mammal, or
PT modulating the uptake of glucose or free fatty acid by skeletal muscle
PT cells or adipocyte cells.

XX Claim 12; Fig 172; 659pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumor necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumor in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems. PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPDSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db |||||
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 23

ADA67345
ID ADA67345 standard; protein; 182 AA.

XX ADA67345;

XX 20-NOV-2003 (first entry)

DE Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear intricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003068795-A1.
PD 10-APR-2003.
XX
PF 15-APR-2002; 2002US-00123236.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005501.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Geritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-695926/66.
DR N-PSDB; ADA67344.
XX
PT Novel isolated PRO secreted and transmembrane polypeptides useful for
PT stimulating the release of tumor necrosis factor-alpha from human blood
PT and detecting the presence of a tumor in a mammal.
XX
PS Claim 12; Fig 172; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also

CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems, PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKPFKEEIRSDNWLASHLGLPPDLSYPANYSDDSKIWRPVEIFRLVSKY 120
Db |||||
QY 121 QNEISDR 127
Db |||||

RESULT 24
ADB30352
ID ADB30352 standard; protein; 182 AA.
XX
AC ADB30352;
XX 20-NOV-2003 (first entry)
DT
XX Human PRO polypeptide #86.
DE
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX Homo sapiens.
OS
XX US2003068794-A1.
PN
XX 10-APR-2003.
PD
XX 15-APR-2002; 2002US-00123155.
PF
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR

PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 21-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US007532.
PR 17-MAY-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US013705.
PR 30-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US014941.
PR 28-JUL-2000; 2000WO-US015264.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.

PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00834208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00863216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-708391/67.
DR N-PSDB; ADA85648.
XX
PT New isolated PRO polypeptides e.g. PRO1801 and PRO1114, useful in the
PT preparation of a medicament for treating a condition responsive to PRO
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Claim 12; Fig 172; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems, PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.

XX SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSESLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSESLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 25
ADA85648
ID ADA85648 standard; protein; 182 AA.
XX
AC ADA85648;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082693-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127843.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786907/74.
DR N-PSDB; ADA85647.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,

CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 26
ADA96860
ID ADA96860 standard; protein; 182 AA.

AC ADA96860;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

OS Homo sapiens.
XX
PN US2003082705-A1.
XX
PD 01-MAY-2003.

XX 24-APR-2002; 2002US-00131829.
PF
XX 09-DEC-1999; 99US-0170262P.
PR
XX 01-DEC-2000; 2000WO-US032678.
PR
XX 19-DEC-2001; 2001US-00028072.

XX (GETH) GEMENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desroyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755112/71.
DR N-PSDB; ADA96859.

XX New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
PT
XX Claim 12; Fig 172; 637pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC the proliferation of or gene expression in pericyte cells, for stimulating
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 27
ADA79164
ID ADA79164 standard; protein; 182 AA.
XX
AC ADA79164;

XX 20-NOV-2003 (first entry)
XX Human PRO polypeptide #86.
DE
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082763-A1.
XX
PD 31-MAY-2003.
XX
PF 17-APR-2002; 2002US-00124818.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.

PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-755116/71.

N-PSDB; ADA79163.

New secreted and transmembrane PRO polypeptides and nucleic acids, useful
in detection and treatment of cancer and in modulating the uptake of
glucose or free fatty acid by skeletal muscle cells or adipocyte cells.

Claim 12; Fig 172; 659pp; English.

The invention relates to isolated human PRO polypeptides (secreted and
transmembrane polypeptides) and the polynucleotides encoding them. The
invention also relates to an antibody which specifically binds to a PRO
polypeptide, a method for stimulating the release of tumour necrosis
factor-alpha (TNF-alpha) from human blood, a method for stimulating the
proliferation or differentiation of chondrocyte cells and a method for
detecting the presence of a tumour in a mammal (e.g. adrenal, lung,

CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db |||||
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db |||||
Qy 121 QNEISDR 127
Db |||||
Qy 121 QNEISDR 127
Db |||||

RESULT 28
ADA87303
ID ADA87303 standard; protein; 182 AA.
XX
AC ADA87303;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
FN US2003087345-A1.
XX
PD 08-MAY-2003.
XX
PF 16-APR-2002; 2002JS-00123907.
XX

PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US003106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 10-MAR-1999; 2000WO-US006319.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.


```
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH ) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786937/74.
DR N-PSDB; ADA87302.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 12; Fig 172; 638pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIa, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
XX polypeptide.
SQ Sequence 182 AA;
```

```
Query Match 69.8%; Score 127; D3 6; Length 182;
Best Local Similarity 100.0%; Pred. NO. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLDPASSLSLVPQVRTSYNFGRTFLGLDKC 60
   |||||
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLDPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
   |||||
DB 61 NACIGTSICKKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
   |||||
DB 121 QNEISDR 127

RESULT 29
ADBI6505
ID ADBI6505 standard; protein; 182 AA.
XX
AC ADBI6505;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087349-A1.
XX
PD 08-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125928.
XX
PR 19-JUN-1998; 98US-0089947P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 02-MAR-2000; 2000WO-US005841.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH ) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786940/74.
DR N-PSDB; ADBI6504.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
```

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db |||||
QY 121 QNEISDR 127
Db |||||

RESULT 30
ADA91597

ID ADA91597 standard; protein; 182 AA.

XX ADA91597;

DT 20-NOV-2003 (first entry)

XX Novel human secreted and transmembrane protein PRO3743.

DE Human; secreted and transmembrane protein; PRO;
XX Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX Homo sapiens.

CS US2003082694-A1.

PN 01-MAY-2003.

XX 22-APR-2002; 2002US-00127845.

XX PR

03-MAR-2000; 2000US-0187202P.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-786908/74.
DR N-PSDB; ADA91596.

XX New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide, or a composition for treating e.g., tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

CC The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for inhibiting the binding of the release of a cytokine from PMBC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 123
Db |||||
QY 121 QNEISDR 127
Db |||||

RESULT 31
ADB14660

ID ADB14660 standard; protein; 182 AA.

XX ADB14660;

XX DT 20-NOV-2003 (first entry)

XX DE Human PRO polypeptide #86.

XX KW Human; PRO; secreted polypeptide; transmembrane polypeptide;

KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

KW liver; microvascular endothelial cell; glucose; FFA;

KW skeletal muscle cell; adipocyte cell; pericyte cell;

KW inner ear utricular supporting cell; T-lymphocyte cell;

KW endothelial cell tube formation; bone disorder; cartilage disorder;

KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

KW immune system cell infiltration.

XX OS Homo sapiens.

XX PN US2003087351-A1.

XX PD 08-MAY-2003.

XX PF 22-APR-2002; 2002US-00127822.

XX PR 17-JUN-1998; 98US-0089532P.

PR 02-JUN-1999; 99WO-US012252.

PR 25-AUG-1999; 99US-00380137.

PR 30-NOV-1999; 99WO-US028313.

PR 01-DEC-2000; 2000WO-US032678.

PR 19-DEC-2001; 2001US-00028072.

XX PA (GETH) GENENTECH INC.

XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-786942/74.

DR N-PSDB; ADH14659.

XX PT New PRO nucleic acid, useful for manufacturing a medicament for

PT diagnosing or treating tumor.

XX PS Claim 12; Fig 172; 637pp; English.

XX CC The invention relates to isolated human PRO polypeptides (secreted and

CC transmembrane polypeptides) and the polynucleotides encoding them. The

CC invention also relates to an antibody which specifically binds to a PRO

CC polypeptide, a method for stimulating the release of tumour necrosis

CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the

CC proliferation or differentiation of chondrocyte cells and a method for

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,

CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The

CC polynucleotides are useful in molecular biology, including uses as

CC hybridisation probes, in chromosome and gene mapping, in generating

CC antisense RNA and DNA and in gene therapy. The polynucleotides may also

CC be used in preparing PRO polypeptides by recombinant techniques and in

CC generating either transgenic animals or knock-out animals which are

CC useful in the development and screening of therapeutically useful

CC reagents. The PRO polypeptides or antibodies are used in preparing a

CC medicament for treating a condition responsive to the polypeptides or

CC antibodies, such as tumours, for stimulating and inhibiting proliferation

CC of human microvascular endothelial cells, for modulating the uptake of

CC glucose or FFA by skeletal muscle cells or adipocyte cells, for

CC stimulating differentiation of adipocyte cells, for stimulating

CC proliferation of or gene expression in pericyte cells, for stimulating

CC the proliferation of inner ear utricular supporting cells or T-lymphocyte

CC cells, for inducing endothelial cell tube formation and for treating

CC various bone and/or cartilage disorders such as sports injuries and

CC arthritis. PRO polypeptides which stimulate the release of proteoglycans

CC from cartilage are useful for treating sports-related joint problems,

CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO

CC polypeptides are also useful for treating various mammalian haemoglobin-

CC associated disorders such as various thalassaemias and conditions which

CC may benefit from enhanced local immune system cell infiltration. This

CC sequence represents a human PRO polypeptide of the invention. Note: The

CC sequence data for this patent is also available in electronic format from

CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 4e-109;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPRAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVQRTSYNFGRTFLGLDKC 60

Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

1 MEPQLGPRAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVQRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKFKKEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIMRPVEIFRLVSKY 120

Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

61 NACIGTSICKKFKFKKEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127

Db ||||| |||||

121 QNEISDR 127

RESULT 32

ADBI8621

ID ADBI8621 standard; protein; 182 AA.

XX AC ADBI8621;

XX DT 20-NOV-2003 (first entry)

XX DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO;

KW Tumour necrosis factor alpha release; TNF-alpha release;

KW Glucose uptake modulator; FFA uptake modulator;

KW cell proliferation stimulator; cell differentiation stimulator;

KW cell differentiation inhibitor; cytokine release.

OS Homo sapiens.

XX PN US2003073211-A1.

XX PD 17-APR-2003.

XX PF 15-APR-2002; 2002US-00123292.

XX PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 16-SEP-1998; 98WO-US019177.

PR 17-SEP-1998; 98WO-US019330.

PR 07-OCT-1998; 98WO-US021141.

PR 29-OCT-1998; 98WO-US022991.

PR 29-OCT-1998; 98WO-US022992.

PR 20-NOV-1998; 98WO-US024855.

PR 01-DEC-1998; 98WO-US025108.

PR 05-JAN-1999; 99WO-US000106.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 20-APR-1999; 99WO-US008615.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US0033565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.

PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WEI; 2003-695954/66.
DR N-PSDB; ADB18620.
XX
PT New isolated nucleic acid and encoded PRO polypeptide, are useful in the
PT diagnosis and treatment of cancer.
XX
PS Claim 12; Fig 172; 638pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyt
XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGMLALLMVVSALSCSFLPSSLSLVPQVWRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGMLALLMVVSALSCSFLPSSLSLVPQVWRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 33
ADA93836
ID ADA93836 standard; protein; 182 AA.
XX
AC ADA93836;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077722-A1.
XX
PD 24-APR-2003.
XX
PF 03-MAY-2002; 2002US-00137872.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.

XX PA (GETH) GENENTECH INC.

XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX DR WPI: 2003-755077/71.

DR N-PSDB; ADA93835.

XX PT New isolated, secreted and transmembrane PRO nucleic acid, useful for the

PT diagnosis, prevention and/or treatment of tumors, such as lung, colon,

PT breast, prostate, rectal, cervical and/or liver tumors.

XX PS Claim 12; Fig 172; 637pp; English.

XX CC The invention relates to isolated human PRO polypeptides (secreted and

CC transmembrane polypeptides) and the polynucleotides encoding them. The

CC invention also relates to an antibody which specifically binds to a PRO

CC polypeptide, a method for stimulating the release of tumour necrosis

CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the

CC proliferation or differentiation of chondrocyte cells and a method for

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,

CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The

CC polynucleotides are useful in molecular biology, including uses as

CC hybridisation probes, in chromosome and gene mapping, in generating

CC antisense RNA and DNA and in gene therapy. The polynucleotides may also

CC be used in preparing PRO polypeptides by recombinant techniques and in

CC generating either transgenic animals or knock-out animals which are

CC useful in the development and screening of therapeutically useful

CC reagents. The PRO polypeptides or antibodies are used in preparing a

CC medicament for treating a condition responsive to the polypeptides or

CC antibodies, such as tumours, for stimulating and inhibiting proliferation

CC of human microvascular endothelial cells, for modulating the uptake of

CC glucose or FFA by skeletal muscle cells or adipocyte cells, for

CC stimulating differentiation of adipocyte cells, for stimulating

CC proliferation of or gene expression in pericyte cells, for stimulating

CC the proliferation of inner ear utricular supporting cells or T-lymphocyte

CC cells, for inducing endothelial cell tube formation and for treating

CC various bone and/or cartilage disorders such as sports injuries and

CC arthritis. PRO polypeptides which stimulate the release of proteoglycans

CC from cartilage are useful for treating sports-related joint problems,

CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO

CC polypeptides are also useful for treating various mammalian haemoglobin-

CC associated disorders such as various thalassaemias and conditions which

CC may benefit from enhanced local immune system cell infiltration. This

CC sequence represents a human PRO polypeptide of the invention. Note: The

CC sequence data for this patent is also available in electronic format from

CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 4e-109;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60

Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLPSYPANYSDDSKTIWRPVEIFRLVSKY 120

Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLPSYPANYSDDSKTIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 34

ADB19732

ID ADB19732 standard; protein; 182 AA.

XX

AC ADB19732;

XX DT 20-NOV-2003 (first entry)

XX DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO;

KW Tumour necrosis factor alpha release; TNF-alpha release;

KW glucose uptake modulator; FFA uptake modulator;

KW cell proliferation stimulator; cell differentiation stimulator;

KW cell differentiation inhibitor; cytokine release stimulator; tumour;

KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;

KW cervical tumour; liver tumour; chromosome mapping; gene mapping;

KW gene therapy; chromosome identification; chromosome marker.

XX OS Homo sapiens.

XX PN US2003082691-A1.

XX PD 01-MAY-2003.

XX PF 22-APR-2002; 2002US-00127838.

XX PR 17-NOV-1998; 98US-0108802P.

PR 01-SEP-1999; 99WO-US020111.

PR 18-OCT-1999; 99US-00403297.

PR 18-FEB-2000; 2000WO-US004342.

PR 02-JUN-2000; 2000WO-US015264.

PR 23-AUG-2000; 2000WO-US023522.

PR 01-DEC-2000; 2000WO-US032678.

PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI: 2003-755108/71.

DR N-PSDB; ADB19731.

XX PRO nucleic acid, useful for preparing a composition for treating e.g.,

tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

CC The invention describes 305 nucleic acids encoding PRO (secreted and

CC transmembrane) polypeptides (I). (I) is useful for stimulating the

CC release of TNF-alpha from human blood, for modulating the uptake of

CC glucose or FFA by skeletal muscle cells or adipocyte cells, for

CC stimulating the proliferation or differentiation of chondrocyte cells,

CC for stimulating the proliferation of or gene expression in pericyte

CC cells, for stimulating the release of proteoglycans from cartilage, for

CC stimulating the proliferation of inner ear utricular supporting cells,

CC for stimulating the proliferation of T-lymphocyte cells, for stimulating

CC the release of a cytokine from PBMC cells, for inhibiting the binding of

CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte

CC cells, for stimulating proliferation of endothelial cells, for detecting

CC the presence of tumour in a mammal. The tumour is lung, colon, breast,

CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes

CC are useful for isolating genomic and cDNA nucleotide sequences or

CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful

CC in assays to identify other proteins or molecules involved in binding

CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome

CC and gene mapping, in generation of antisense RNA and DNA, in the

CC preparation of PRO polypeptide, for generating transgenic animals or

CC knockout animals which in turn are useful in the development and

CC screening of therapeutically useful reagents, in gene therapy, for

CC chromosome identification, as chromosome marker, and for generating

CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.

CC detecting its expression in specific cells, tissues or serum, and for

CC affinity purification of PRO from recombinant cell culture or natural

CC sources. (I) and (II) are useful for tissue typing. This is the amino

PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US0005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.

PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

XX (SETH) GENENTECH INC.

PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX

DR WPI; 2003-492275/46.

DR N-PSDB; ACD98509.

XX New transmembrane polypeptides and nucleic acids encoding the
PT polypeptides, useful in gene therapy, in chromosome identification, as
PT chromosome markers, or in generating probes.

XX Claim 12; Fig 172; 660pp; English.

XX The invention describes an isolated nucleic acid encoding a PRO (secreted
CC and transmembrane) polypeptide. Nucleic acids which encode PRO can be
CC used to generate either transgenic animals or knock-out animals useful in
CC developing and screening of therapeutically useful reagents. The nucleic
CC acids may also be used in gene therapy, in chromosome identification, as
CC chromosome markers, or in generating probes. The PRO polypeptides are
CC useful as molecular markers for protein electrophoresis, and the isolated
CC nucleic acids may be used for recombinantly expressing those markers. The
CC PRO polypeptides and nucleic acids may also be used in tissue typing.
CC Anti-PRO antibodies are useful in diagnostic assays for PRO, and in
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. This is the amino acid sequence of a novel human secreted and
CC transmembrane PRO polypeptide

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLPASSLSLVQPVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWRPVEIFRLVSKY 120
Db |||||
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 37

ADA74298
ID ADA74298 standard; protein; 182 AA.
XX
AC ADA74298;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003068798-A1.
XX
PD 10-APR-2003.
XX
PF 07-MAY-2002; 2002US-00140928.
XX
PR 31-MAR-1997; 97WC-US005230.
PR 12-JUN-1998; 98WC-US012456.
PR 14-JUL-1998; 98WC-US014552.
PR 28-AUG-1998; 98WC-US017888.
PR 10-SEP-1998; 98WC-US018824.
PR 14-SEP-1998; 98WC-US019093.
PR 14-SEP-1998; 98WC-US019094.
PR 14-SEP-1998; 98WC-US019177.
PR 16-SEP-1998; 98WC-US019330.
PR 17-SEP-1998; 98WC-US019437.
PR 07-OCT-1998; 98WC-US021141.
PR 29-OCT-1998; 98WC-US022991.
PR 29-OCT-1998; 98WC-US022992.
PR 20-NOV-1998; 98WC-US024855.
PR 01-DEC-1998; 98WC-US025108.
PR 05-JAN-1999; 99WC-US000106.
PR 08-MAR-1999; 99WC-US005028.
PR 10-MAR-1999; 99WC-US005190.
PR 20-APR-1999; 99WC-US008615.
PR 14-MAY-1999; 99WC-US010733.
PR 02-JUN-1999; 99WC-US012252.
PR 01-SEP-1999; 99WC-US020111.
PR 08-SEP-1999; 99WC-US020594.
PR 13-SEP-1999; 99WC-US020944.
PR 15-SEP-1999; 99WC-US021090.
PR 15-SEP-1999; 99WC-US021547.
PR 05-OCT-1999; 99WC-US023089.
PR 29-NOV-1999; 99WC-US028214.
PR 30-NOV-1999; 99WC-US028313.
PR 30-NOV-1999; 99WC-US028409.
PR 01-DEC-1999; 99WC-US028301.
PR 01-DEC-1999; 99WC-US028634.
PR 02-DEC-1999; 99WC-US028551.
PR 02-DEC-1999; 99WC-US028564.
PR 02-DEC-1999; 99WC-US028565.
PR 16-DEC-1999; 99WC-US030095.
PR 20-DEC-1999; 99WC-US030911.
PR 20-DEC-1999; 99WC-US030999.
PR 22-DEC-1999; 99WC-US030720.
PR 30-DEC-1999; 99WC-US031243.
PR 30-DEC-1999; 99WC-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.

PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-625490/59.
DR N-PSDB; ADA74297.
XX
XX
PT Novel secreted and transmembrane PRO polypeptides and polynucleotides
PT encoding them, useful for treating bone disorders, arthritis, heart
PT attack, injuries, tumors, and stimulating release of Tumor Necrosis
PT Factor-alpha from human blood.
XX
PS Claim 12; Fig 172; 659pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
transmembrane polypeptides) and the polynucleotides encoding them. The

Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
| | | | |

Db 121 QNEISDR 127

RESULT 39
ADA82055
ID ADA82055 standard; protein; 182 AA.
AC ADA82055;
XX 20-NOV-2003 (first entry)
XX Human PRO polypeptide #86.
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX Homo sapiens.
XX US2003082701-A1.
PN 01-MAY-2003.
PD 23-APR-2002; 2002US-00128686.
PE 31-AUG-1998; 98US-0098525P.
PR 16-SEP-1998; 98US-0100634P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 02-JUN-2000; 2000WO-US015264.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-755110/71.
DR N-PSDB; ADA82054.
XX PRO nucleic acid, useful for preparing a composition for treating e.g.,
PT tumor or for tissue typing.
XX Claim 12; Fig 172; 637pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
XX invention also relates to an antibody which specifically binds to a PRO
XX polypeptide, a method for stimulating the release of tumour necrosis
XX factor-alpha (TNF-alpha) from human blood, a method for stimulating the
XX proliferation or differentiation of chondrocyte cells and a method for
XX detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
XX colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
XX polynucleotides are useful in molecular biology, including uses as
XX hybridisation probes, in chromosome and gene mapping, in generating
XX antisense RNA and DNA and in gene therapy. The polynucleotides may also
XX be used in preparing PRO polypeptides by recombinant techniques and in
XX generating either transgenic animals or knock-out animals which are
XX useful in the development and screening of therapeutically useful

CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSLSLVPQVRTSYNFGRTFLGLDKC 60
| | | | |
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSPANYSDDSKIWRPVEIFRLVSKY 120
| | | | |
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
| | | | |
Db 121 QNEISDR 127

RESULT 40
ADA75018

ID ADA75018 standard; protein; 182 AA.

XX ADA75018;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

DE Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX Homo sapiens.

OS US2003073216-A1.

XX 17-APR-2003.

XX 30-MAY-2002; 2002US-00160498.

XX 31-MAR-1997; 97WO-US005230.

XX 12-JUN-1998; 98WO-US012456.

XX 14-JUL-1998; 98WO-US014552.

XX 28-AUG-1998; 98WO-US017888.

XX 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.

PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-765392/72.
DR N-PSDB; ADA75017.
XX
PT
PT
XX
PS
XX

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-765392/72.

N-PSDB; ADA75017.

New secreted and transmembrane PRO polypeptides useful for stimulating the release of tumor necrosis factor alpha in human blood and detecting the presence of tumor in a mammal.

Claim 12; Fig 172; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumor necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.

Sequence 182 AA;

SQ

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPSSLSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPSSLSLVPOVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 41
ADA85096
ID ADA85096 standard; protein; 182 AA.
XX
AC ADA85096;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; breast tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.

XX XX US2003082695-A1.
XX PD 01-MAY-2003.
XX PE 22-APR-2002; 2002US-00127846.
XX PR 03-MAR-2000; 2000US-0167202P.
XX PR 01-DEC-2000; 2000WO-US032678.
XX PR 19-DEC-2001; 2001US-00028072.
XX PA (GETH) GENENTECH INC.
XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786909/74.
DR N-PSDB; ADA85095.
XX
PT New nucleic acid encoding a PRO polypeptide, useful for preparing a
PT composition for treating e.g. tumor by gene therapy, or for tissue
PT typing.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of

CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPSSLSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPSSLSLVPOVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 42
ADA84544
ID ADA84544 standard; protein; 182 AA.
XX
AC ADA84544;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; breast tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX OS Homo sapiens.
XX US2003082708-A1.
XX PD 01-MAY-2003.

XX PE 15-MAY-2002; 2002US-00146729.
XX PR 05-JUN-2000; 2000US-0209832P.
XX PR 01-DEC-2000; 2000WO-US032678.
XX PR 19-DEC-2001; 2001US-00028072.

XX PA (GETH) GENENTECH INC.

XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritser ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786911/74.
DR N-PSDB; ADA84543.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g. tumor or for tissue typing.
XX
XX Claim 12; Fig 172; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
XX polypeptide.
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60
Db
1 MEPQLGPEAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db
61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db
121 QNEISDR 127

RESULT 43
ADB29800
ID ADB29800 standard; protein; 182 AA.
XX
AC ADB29800;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003073214-A1.
XX
PD 17-APR-2003.
XX
PF 17-APR-2002; 2002US-00124822.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.

PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WC-US013705.
PR 22-MAY-2000; 2000WC-US014042.
PR 30-MAY-2000; 2000WC-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-720081/68.
DR N-PSDB; ADB29799.
XX
PT Novel secreted and transmembrane PRO polypeptides useful for stimulating
PT the release of tumor necrosis factor alpha and detecting the presence of
PT a tumor in a mammal.
XX
PS Claim 12; Fig 172; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumor necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a

CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLVVSALSCSFLPASLSLVPQVRTSYNFGRTFLGLDKC 60
|||
Db 1 MEPQLGPEAAALRPGWLALLLVVSALSCSFLPASLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
|||
Db 61 NACIGTSICKKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
|||
Db 121 QNEISDR 127

RESULT 44

ADA80328
ID ADA80328 standard; protein; 182 AA.

XX AC ADA80328;

XX DT 20-NOV-2003 (first entry)

XX DE Human PRO polypeptide #86.

XX KW Human; PRO; secreted polypeptide; transmembrane polypeptide;

KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

KW liver; microvascular endothelial cell; glucose; FFA;

KW skeletal muscle cell; adipocyte cell; pericyte cell;

KW inner ear utricular supporting cell; T-lymphocyte cell;

KW endothelial cell tube formation; bone disorder; cartilage disorder;

KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

KW immune system cell infiltration.

XX OS Homo sapiens.

XX US US2003082761-A1.

XX PD 01-MAY-2003.

XX PF 12-APR-2002; 2002US-00121061.

XX PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
ER 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 01-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
ER 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.

PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-755115/71.

DR N-PSDB; ADA80327.

XX New PRO polypeptides useful for treating diabetes, hyper- or hypo-

PT insulinemia, sports injuries, arthritis, obesity, stroke, heart attack,
PT various coagulation disorders and tumors.

XX Claim 12; Fig 172; 638pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match

59.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPERAAALPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPERAAALPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 45
ADA75570
ID ADA75570 standard; protein; 182 AA.

AC ADA75570;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX Homo sapiens.

OS US2003082703-A1.

PN 01-MAY-2003.

XX 23-APR-2002; 2002US-00128691.

XX 09-DEC-1999; 99JS-0170262P.

PR 01-DEC-2000; 2000WO-US032678.

PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zharg Z;

XX WPI; 2003-765414/72.

DR N-PSDB; ADA75569.

XX New PRO nucleic acid, useful for preparing a composition for treating

PT e.g., tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
transmembrane polypeptides) and the polynucleotides encoding them. The
invention also relates to an antibody which specifically binds to a PRO
polypeptide, a method for stimulating the release of tumour necrosis
factor-alpha (TNF-alpha) from human blood, a method for stimulating the
proliferation or differentiation of chondrocyte cells and a method for
detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
polynucleotides are useful in molecular biology, including uses as
hybridisation probes, in chromosome and gene mapping, in generating

CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC the proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems, PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPERAAALPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Db 1 MEPQLGPERAAALPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 46

ID ADA46795 standard; protein; 182 AA.

XX ADA46795;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

DE Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX Homo sapiens.

OS US2003073210-A1.

XX 17-APR-2003.

XX 11-APR-2002; 2002US-00121045.

XX 31-MAR-1997; 97WO-US005230.

PR

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US0038615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 01-DEC-2000; 2000WO-US030873.
PR 20-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 28-FEB-2001; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 01-MAR-2001; 2001WO-US0006520.
PR 01-MAR-2001; 2001WO-US006566.

PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godcwski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-644800/61.
N-PSDB; ADA46794.

New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or PRO4978, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy.

Claim 12; Fig 172; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from

CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

SQ Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db |||||

QY 121 QNEISDR 127
Db |||||

QY 121 QNEISDR 127

RESULT 47
ADB25091

ID ADB25091 standard; protein; 182 AA.

XX ADB25091;

XX 20-NOV-2003 (first entry)

DE Human PRO polypeptide SEQ ID NO 172.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX Homo sapiens.

XX US2003077715-A1.

PD 24-APR-2003.

XX 23-APR-2002; 2002US-00128693.

XX 31-AUG-1998; 98US-0098525P.

PR 16-SEP-1998; 98US-0100634P.

PR 02-JUN-1999; 99WO-US012252.

PR 25-AUG-1999; 99US-00380137.

PR 30-MAR-2000; 2000WO-US008439.

PR 02-JUN-2000; 2000WO-US015264.

PR 01-DEC-2000; 2000WO-US032678.

PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Destroyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-755070/71.
DR N-PSDB; ADB25090.

XX New isolated, secreted and transmembrane PRO nucleic acids, useful for
PT the diagnosis, prevention and/or treatment of tumors, such as lung,
PT colon, breast, prostate, rectal, cervical and/or liver tumors.

XX Claim 12; Fig 172; 637pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

SQ Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db |||||

QY 121 QNEISDR 127
Db |||||

QY 121 QNEISDR 127

RESULT 48
ADA93267

ID ADA93267 standard; protein; 182 AA.

XX ADA93267;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

KW immune system cell infiltration.
XX Homo sapiens.
OS US2003077721-A1.
XX 24-APR-2003.
XX 24-APR-2002; 2002US-00131837.
XX 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00023072.
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-755076/71.
DR N-PSDS; ADA93266.
XX New PRO nucleic acid, useful for recombinantly producing a PRO
PT polypeptide and for manufacturing a medicament for diagnosing or treating
PT tumor.
XX Claim 12; Fig 172; 637pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX Sequence 182 AA;
SQ

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-139;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
DB 1 MEPQLGPEAAALPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKFKBEIRSDNWLASHLGLPDSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
61 NACIGTSICKKFKFKBEIRSDNWLASHLGLPDSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db |||||||
121 QNEISDR 127
RESULT 49
ADB26617
ID ADB26617 standard; protein; 182 AA.
XX
AC ADB26617;
XX
DT 20-NOV-2003 (first entry)
XX Human PRO polypeptide #86.
DE
XX Human PRO polypeptide #86.
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX Homo sapiens.
OS US2003092147-A1.
XX 15-MAY-2003.
XX 11-APR-2002; 2002US-00121051.
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 16-SEP-1998; 98WO-US019177.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 98WO-US000106.
PR 08-MAR-1999; 98WO-US005028.
PR 10-MAR-1999; 98WO-US005190.
PR 20-APR-1999; 98WO-US008615.
PR 14-MAY-1999; 98WO-US010733.
PR 02-JUN-1999; 98WO-US012252.
PR 01-SEP-1999; 98WO-US020111.
PR 08-SEP-1999; 98WO-US020594.
PR 13-SEP-1999; 98WO-US020944.
PR 15-SEP-1999; 98WO-US021090.
PR 15-SEP-1999; 98WO-US021547.
PR 05-OCT-1999; 98WO-US023089.
PR 29-NOV-1999; 98WO-US028214.
PR 30-NOV-1999; 98WO-US028313.
PR 30-NOV-1999; 98WO-US028409.
PR 01-DEC-1999; 98WO-US028301.
PR 01-DEC-1999; 98WO-US028634.
PR 02-DEC-1999; 98WO-US028551.
PR 02-DEC-1999; 98WO-US028564.
PR 02-DEC-1999; 98WO-US028565.

PR	16-DEC-1999;	99WO-US030095;
PR	20-DEC-1999;	99WO-US030911;
PR	20-DEC-1999;	99WO-US030999;
PR	22-DEC-1999;	99WO-US030720;
PR	30-DEC-1999;	99WO-US031243;
PR	30-DEC-1999;	99WO-US031274;
PR	05-JAN-2000;	2000WO-US000219;
PR	06-JAN-2000;	2000WO-US000277;
PR	06-JAN-2000;	2000WO-US000376;
PR	11-FEB-2000;	2000WO-US003565;
PR	18-FEB-2000;	2000WO-US004341;
PR	18-FEB-2000;	2000WO-US004342;
PR	22-FEB-2000;	2000WO-US004414;
PR	24-FEB-2000;	2000WO-US004914;
PR	24-FEB-2000;	2000WO-US005004;
PR	01-MAR-2000;	2000WO-US005601;
PR	02-MAR-2000;	2000WO-US005841;
PR	10-MAR-2000;	2000WO-US006319;
PR	15-MAR-2000;	2000WO-US006884;
PR	20-MAR-2000;	2000WO-US007377;
PR	21-MAR-2000;	2000WO-US007532;
PR	30-MAR-2000;	2000WO-US008439;
PR	17-MAY-2000;	2000WO-US013705;
PR	22-MAY-2000;	2000WO-US014042;
PR	30-MAY-2000;	2000WO-US014941;
PR	02-JUN-2000;	2000WO-US015264;
PR	28-JUL-2000;	2000WO-US020710;
PR	11-AUG-2000;	2000WO-US022031;
PR	23-AUG-2000;	2000WO-US023522;
PR	24-AUG-2000;	2000WO-US023328;
PR	08-NOV-2000;	2000WO-US030952;
PR	10-NOV-2000;	2000WO-US030873;
PR	01-DEC-2000;	2000WO-US032678;
PR	20-DEC-2000;	2000WO-US0747259;
PR	20-DEC-2000;	2000WO-US034956;
PR	28-FEB-2001;	2001US-00796498;
PR	28-FEB-2001;	2001WO-US006520;
PR	01-MAR-2001;	2001WO-US006666;
PR	09-MAR-2001;	2001US-00802706;
PR	14-MAR-2001;	2001US-00808689;
PR	22-MAR-2001;	2001US-00816744;
PR	05-APR-2001;	2001US-00828366;
PR	10-MAY-2001;	2001US-00854208;
PR	10-MAY-2001;	2001US-00854280;
PR	18-MAY-2001;	2001US-00860216;
PR	25-MAY-2001;	2001US-00866028;
PR	25-MAY-2001;	2001US-00866034;
PR	25-MAY-2001;	2001WO-US017092;
PR	01-JUN-2001;	2001US-00872035;
PR	01-JUN-2001;	2001WO-US017800;
PR	05-JUN-2001;	2001US-00874503;
PR	14-JUN-2001;	2001US-00882636;
PR	19-JUN-2001;	2001US-00886342;
PR	20-JUN-2001;	2001WO-US019692;
PR	21-JUN-2001;	2001US-00887879;
PR	22-JUN-2001;	2001WO-US020116;
PR	29-JUN-2001;	2001WO-US021066;
PR	09-JUL-2001;	2001WO-US021735;
PR	18-JUL-2001;	2001US-00908827;
PR	06-AUG-2001;	2001US-00924419;
PR	09-AUG-2001;	2001US-00927796;
PR	16-AUG-2001;	2001US-00931836;
PR	19-DEC-2001;	2001US-00028072;

Novel isolated PRO polypeptide useful for treating diabetes, hyper- or hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart attack, various coagulation disorders, tumors.

Claim 12; Fig 172; 660pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the USPTO website at segdata.uspto.gov.

KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX

OS Homo sapiens.

XX US2003096385-A1.

PD 22-MAY-2003.

XX 11-APR-2002; 2002US-00121042.

PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004341.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005941.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.

PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX
DR WPI; 2003-786990/74.
DR N-PSDB; ADB30903.

XX
PT Novel isolated PRO polypeptide useful for treating diabetes, hyper- or
PT hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart
PT attack, various coagulation disorders, tumors.

XX
PS Claim 12; Fig 172; 638pp; English.

XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a

CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems, PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.

XX
SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||||
Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||||
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db |||||||
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db |||||||
Qy 121 QNEISDR 127
Db |||||||
Qy 121 QNEISDR 127

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 07:40:44 ; Search time 31.9472 Seconds
(without alignments)
734.069 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114
Perfect score: 444
Sequence: 1 LPASSLSLVQVQRTSYNFG.....LSYPANYSDDSKIMRPVEIF 83

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : A_Geneseq_25Jan04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	444	100.0	182	3 AAY91393	Aay91393 Human sec
2	444	100.0	182	4 AAUL1257	Aaul1257 Human PRO
3	444	100.0	182	4 AAB95695	Aab95695 Human pro
4	444	100.0	182	4 AAB48066	Aab48066 Human ext
5	444	100.0	182	6 ABU03563	Abu03563 Angiogene
6	444	100.0	182	6 ABC17701	Abc17701 Novel hum
7	444	100.0	182	6 ABU80955	Abu80955 Human PRO
8	444	100.0	182	6 ABU66655	Abu66655 Human PRO
9	444	100.0	182	6 ABU59736	Abu59736 Novel sec
10	444	100.0	182	6 ABR47459	Abra47459 Breast ca
11	444	100.0	182	6 ABO24926	Abc24926 Human sec
12	444	100.0	182	6 ABU66931	Abu66931 Human sec
13	444	100.0	182	6 ADA45691	Ada45691 Novel hum
14	444	100.0	182	6 ADA76122	Ada76122 Human PRO
15	444	100.0	182	6 ADA18772	Ada18772 Human PRO
16	444	100.0	182	6 ADA61395	Ada61395 Homo sapi
17	444	100.0	182	6 ADB19180	Adb19180 Novel hum
18	444	100.0	182	6 ADB27721	Adb27721 Human PRO
19	444	100.0	182	6 ADA86200	Ada86200 Novel hum
20	444	100.0	182	6 ADB15764	Adb15764 Human PRO
21	444	100.0	182	6 ADA47550	Ada47550 Human PRO
22	444	100.0	182	6 ADA67345	Ada67345 Human PRO
23	444	100.0	182	6 ADB30352	Adb30352 Human PRO
24	444	100.0	182	6 ADA85648	Ada85648 Novel hum
25	444	100.0	182	6 ADA96860	Ada96860 Human PRO

26	444	100.0	182	6 ADA79164	Ada79164 Human PRO
27	444	100.0	182	6 ADA87303	Ada87303 Novel hum
28	444	100.0	182	6 ADB16505	Adb16505 Human PRO
29	444	100.0	182	6 ADA91597	Ada91597 Novel hum
30	444	100.0	182	6 ADB14660	Adb14660 Human PRO
31	444	100.0	182	6 ADB18621	Adb18621 Novel hum
32	444	100.0	182	6 ADA93836	Ada93836 Human PRO
33	444	100.0	182	6 ADB19732	Adb19732 Novel hum
34	444	100.0	182	6 ADB13044	Adb13044 Human PRO
35	444	100.0	182	6 ABO43234	Abo43234 Novel hum
36	444	100.0	182	6 ADA74298	Ada74298 Human PRO
37	444	100.0	182	6 ADB24531	Adb24531 Human PRO
38	444	100.0	182	6 ADA82055	Ada82055 Human PRO
39	444	100.0	182	6 ADA75018	Ada75018 Human PRO
40	444	100.0	182	6 ADA85096	Ada85096 Novel hum
41	444	100.0	182	6 ADA84544	Ada84544 Novel hum
42	444	100.0	182	6 ADB29800	Adb29800 Human PRO
43	444	100.0	182	6 ADA80328	Ada80328 Human PRO
44	444	100.0	182	6 ADA75570	Ada75570 Human PRO
45	444	100.0	182	6 ADA46795	Ada46795 Human PRO
46	444	100.0	182	6 ADB25091	Adb25091 Human PRO
47	444	100.0	182	6 ADA93267	Ada93267 Human PRO
48	444	100.0	182	6 ADB26617	Adb26617 Human PRO
49	444	100.0	182	6 ADB30904	Adb30904 Human PRO
50	444	100.0	182	6 ADA60832	Ada60832 Homo sapi
51	444	100.0	182	6 ADB23979	Adb23979 Human PRO
52	444	100.0	182	6 ADA96308	Ada96308 Human PRO
53	444	100.0	182	6 ADA80880	Ada80880 Human PRO
54	444	100.0	182	6 ADA95756	Ada95756 Human PRO
55	444	100.0	182	6 ADB26065	Adb26065 Human PRO
56	444	100.0	182	6 ADB21550	Adb21550 Novel hum
57	444	100.0	182	7 ADA77329	Ada77329 Human PRO
58	444	100.0	182	7 ADB18069	Adb18069 Human PRO
59	444	100.0	182	7 ADA86752	Ada86752 Novel hum
60	444	100.0	182	7 ADA87855	Ada87855 Novel hum
61	444	100.0	182	7 ADA46243	Ada46243 Novel hum
62	444	100.0	182	7 ADB28273	Adb28273 Human PRO
63	444	100.0	182	7 ADB28825	Adb28825 Human PRO
64	444	100.0	182	7 ADA76777	Ada76777 Human PRO
65	444	100.0	182	7 ADA88407	Ada88407 Novel hum
66	444	100.0	182	7 ADA97412	Ada97412 Human PRO
67	444	100.0	182	7 ADB27169	Adb27169 Human PRO
68	444	100.0	182	7 ADB22102	Adb22102 Novel hum
69	444	100.0	182	7 ADA66793	Ada66793 Human PRO
70	444	100.0	182	7 ADB22654	Adb22654 Human PRO
71	444	100.0	182	7 ADB23427	Adb23427 Human PRO
72	444	100.0	182	7 ADA92149	Ada92149 Novel hum
73	444	100.0	182	7 ADB15212	Adb15212 Human PRO
74	444	100.0	182	7 ADB38464	Adb38464 Novel hum
75	444	100.0	182	7 ADB37912	Adb37912 Novel hum
76	444	100.0	182	7 ADB66384	Adb66384 Novel hum
77	444	100.0	182	7 ADB89464	Adb89464 Human PRO
78	444	100.0	182	7 ADB90196	Adb90196 Human PRO
79	444	100.0	182	7 ADB39297	Adb39297 Novel hum
80	444	100.0	182	7 ADB46920	Adb46920 Novel hum
81	444	100.0	182	7 ADB86527	Adb86527 Human PRO
82	444	100.0	182	7 ADB77132	Adb77132 Novel hum
83	444	100.0	182	7 ADB34289	Adb34289 Human PRO
84	444	100.0	182	7 ADB35393	Adb35393 Human PRO
85	444	100.0	182	7 ADB33737	Adb33737 Human PRO
86	444	100.0	182	7 ADB34841	Adb34841 Human PRO
87	444	100.0	182	7 ADB35945	Adb35945 Human PRO
88	444	100.0	182	7 ADB46340	Adb46340 Novel hum
89	444	100.0	182	7 ADC50213	Adc50213 Novel hum
90	444	100.0	182	7 ADC71760	Adc71760 Novel hum
91	444	100.0	182	7 ADC59739	Adc59739 Novel hum
92	444	100.0	182	7 ADC52746	Adc52746 Novel hum
93	444	100.0	182	7 ADC57100	Adc57100 Novel hum
94	444	100.0	182	7 ADC60291	Adc60291 Novel hum
95	444	100.0	182	7 ADC50766	Adc50766 Novel hum
96	444	100.0	182	7 ADC65293	Adc65293 Human PRO
97	444	100.0	182	7 ADC54391	Adc54391 Novel hum
98	444	100.0	182	7 ADC53352	Adc53352 Novel hum

99 444 100.0 182 7 ADC58875 Adc58875 Novel hum
100 444 100.0 182 7 ADC55753 Adc55753 Novel hum

ALIGNMENTS

RESULT 1
AA91393
ID AAY91393 standard; protein; 182 AA.
XX AAY91393;
XX 29-JUN-2000 (first entry)
XX Human secreted protein sequence encoded by gene 48 SEQ ID NO:114.
DE Human; secreted protein; diagnosis; neuroprotective; nootropic;
XX neuroleptic; antimanic; cerebroprotective; immunomodulatory;
KW anti-microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
KW anticonvulsant; vasotropic; vaccine; gene therapy; anti-sense therapy;
KW neural; reproductive; immune disorder; immunodeficiency; infection;
KW lymphoma; demyelinating disease; autoimmunity; cancer; inflammation;
KW aneurysm; haemorrhage; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; Tourette syndrome; multiple sclerosis; meningitis;
KW ischaemia; mania; dementia; obsessive compulsive disorder;
KW viral prophylaxis; developmental disorder; sexually-linked disorder;
KW cardiovascular disorder; food additive; preservative.

XX Homo sapiens.
OS WO200011014-A1.
XX 02-MAR-2000.
XX 24-AUG-1999; 99WO-US019330.
XX 25-AUG-1998; 98US-0097917P.
XX 31-AUG-1998; 98US-0098634P.
XX (HUMA-) HUMAN GENOME SCI INC.

XX Moore PA, Ruben SM, Olsen HS, Shi Y, Rosen CA, Florence KA;
PI Soppet DR, Lafleur DW, Endress GA, Ebner R, Komatsoulis G, Duan RD;
XX WPI; 2000-224656/19.
DR N-PSDB; AAA26328.

XX Novel secreted proteins and corresponding DNA molecules that can be used
FT to prevent, treat and diagnose disease in humans, for example,
FT Alzheimer's, cancer, and immune disorders.

PS Claim 11; Page 380-381; 416pp; English.

XX The polynucleotide sequences given in AAA26281 to AAA26336 encode the
CC human secreted proteins given in AAY91346 to AAY91449. The human secreted
CC proteins can have activities based on the tissues and cells they are
CC expressed in. Examples of the activities are: neuroprotective; nootropic;
CC neuroleptic; antimanic; cerebroprotective; immunomodulatory; anti-
CC microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
CC anticonvulsant; and vasotropic. The polynucleotides and proteins may be
CC used to prevent, treat or ameliorate a medical condition, e.g. by protein
CC or gene therapy. Conditions treatable by the proteins of the invention
CC include neural, reproductive, or immune disorders, especially
CC immunodeficiency, infection, lymphomas, demyelinating diseases, auto-
CC immunities, cancer, general microbial infection, inflammation, aneurysms
CC and haemorrhages. Specific examples include: Alzheimer's disease;
CC Parkinson's; Huntington's; Tourette syndrome; multiple sclerosis;
CC meningitis; ischaemia; prostate cancer; mania; dementia; obsessive
CC compulsive disorder and viral prophylaxis. The polynucleotides and
CC proteins can also be used in the detection of disorders associated with
CC the function of the protein, for example, the detection of developmental
CC disorders, sexually-linked disorders, or disorders of the cardiovascular

CC system. They may also be used as food additives or preservatives.
CC AAA26272 to AAA26280 and AAY91345 are sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 3; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DSLSSYPANYSDDSKIWRPVEIF 83
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
92 DSLSSYPANYSDDSKIWRPVEIF 114

RESULT 2
AAU12257
ID AAU12257 standard; protein; 182 AA.
XX AAU12257;
AC 24-OCT-2001 (first entry)
XX Human PRO3743 polypeptide sequence.

XX Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
KW prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;
KW ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
KW A-peptide; factor VIIA; gene therapy.

OS Homo sapiens.

XX WO200140466-A2.

XX 07-JUN-2001.

XX 01-DEC-2000; 2000WO-US032678.

XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 02-DEC-1999; 99WO-US028551.
XX 02-DEC-1999; 99WO-US028564.
XX 02-DEC-1999; 99WO-US028565.
XX 09-DEC-1999; 99US-0170262P.
XX 16-DEC-1999; 99WO-US030095.
XX 20-DEC-1999; 99WO-US030911.
XX 20-DEC-1999; 99WO-US030999.
XX 30-DEC-1999; 99WO-US031243.
XX 30-DEC-1999; 99WO-US031274.
XX 05-JAN-2000; 2000WO-US000219.
XX 06-JAN-2000; 2000WO-US000277.
XX 06-JAN-2000; 2000WO-US000376.
XX 11-FEB-2000; 2000WO-US003565.
XX 18-FEB-2000; 2000WO-US004341.
XX 18-FEB-2000; 2000WO-US004342.
XX 22-FEB-2000; 2000WO-US004414.
XX 24-FEB-2000; 2000WO-US004914.
XX 24-FEB-2000; 2000WO-US005004.
XX 21-MAR-2000; 2000WO-US005601.
XX 02-MAR-2000; 2000WO-US005841.
XX 03-MAR-2000; 2000US-0187202P.
XX 10-MAR-2000; 2000WO-US006319.
XX 15-MAR-2000; 2000WO-US006884.
XX 20-MAR-2000; 2000WO-US007377.
XX 21-MAR-2000; 2000WO-US007532.
XX 30-MAR-2000; 2000WO-US008439.
XX 17-MAY-2000; 2000WO-US013705.
XX 22-MAY-2000; 2000WO-US014042.
XX 30-MAY-2000; 2000WO-US014941.

PR 02-JUN-2000; 2000WC-US015264.
PR 05-JUN-2000; 2000US-0209832P.
PR 28-JUL-2000; 2000WC-US020710.
PR 11-AUG-2000; 2000WC-US022031.
PR 23-AUG-2000; 2000WC-US023522.
PR 24-AUG-2000; 2000WC-US023328.
PR 08-NOV-2000; 2000WC-US030952.
PR 10-NOV-2000; 2000WC-US030873.
PA (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2001-408281/43.
DR N-PSDB; AAS21329.
XX Isolated , secretory and transmembrane PRO polypeptide used to detect
PT other PRO polypeptides, link bioactive molecules to cells expressing PRO
PT polypeptides, and detect the presence of mammalian tumors e.g. lung,
PT breast, prostate, cervical.
XX Claim 12; Fig 172; 813pp; English.
XX AAU12172-AAJ12446 represent novel human secretory and transmembrane PRO
CC polypeptides. The PRO polypeptides are useful to detect other PRO
CC polypeptides, to link bioactive molecules to cells expressing PRO
CC polypeptides, to modulate biological activities of cells expressing PRO
CC polypeptides, and to detect the presence of mammalian lung, colon,
CC breast, prostate, rectal, cervical or liver tumours by comparing PRO
CC polypeptide expression in a cell sample to that in a control sample. Some
CC of the 275 sequences are also useful to stimulate the release of tumour
CC necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
CC differentiation of chondrocytes, the proliferation or gene expression in
CC pericyte cells, the release of proteoglycans from cartilage, the
CC proliferation of inner ear utricular supporting cells or of T-
CC lymphocytes, the release of a cytokine from peripheral blood monocytes
CC (PBMCs), or the proliferation of endothelial cells. Some of the PRO
CC polypeptides may modulate glucose or free fatty acid uptake by skeletal
CC muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
CC VIIA. The PRO polypeptides can be used in assays to identify molecules
CC involved in binding interactions. The polynucleotides encoding PRO
CC polypeptides can be used to generate probes, antisense RNA/DNA,
CC transgenic or knock out animals and can be used in gene therapy
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVLPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVLPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSLLSYYPANYSDDSKIWRPVEIF 83
Db 92 DSLLSYYPANYSDDSKIWRPVEIF 114
RESULT 3
AAB95695
ID AAB95695 standard; protein; 182 AA.
XX
AC AAB95695;
XX
DT 26-JUN-2001 (first entry)
XX Human protein sequence SEQ ID NO:18516.
DE
XX Human; primer; detection; diagnosis; antisense therapy; gene therapy.
KW
XX

OS Homo sapiens.
XX EP1074617-A2.
PN
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX WPI; 2001-318743/34.
DR
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX Claim 8; SEQ ID NO 18516; 2537pp + Sequence Listing; English.
XX The present invention describes primer sets for synthesising 5602 full-
PS length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification; where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVLPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVLPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSLLSYYPANYSDDSKIWRPVEIF 83
Db 92 DSLLSYYPANYSDDSKIWRPVEIF 114
RESULT 4
AAB48066
ID AAB48066 standard; protein; 182 AA.
XX
AC AAB48066;
XX
DT 19-MAR-2001 (first entry)

XX DE Human extracellular signaling molecule (EXCS) (ID 5090841CD1).

XX KW Extracellular signaling molecule; EXCS; anti-inflammatory; human;

XX KW immunosuppressive; cytostatic; neuroprotective; gastrointestinal;

XX KW virucide; antibacterial; anti-HIV; human immunodeficiency virus;

XX KW antifertility; cerebroprotective; nootropic; antitumor; antifungal;

XX KW anticonvulsant; tranquilizer; neuroleptic; vasotropic; gynecological;

XX KW keratolytic; protozoacide; gene therapy.

OS Homo sapiens.

XX PN WO200070049-A2.

XX PD 23-NOV-2000.

XX PF 19-MAY-2000; 2000WO-US013975.

XX PR 19-MAY-1999; 99US-0134949P.

XX PR 15-JUL-1999; 99US-0144270P.

XX PR 30-JUL-1999; 99US-0146700P.

XX PR 04-OCT-1999; 99US-0157508P.

XX PA (INCY-) INCYTE GENOMICS INC.

XX PI Tang YT, Yue H, Lal P, Burford N, Bandman O, Baughn MR;

XX PI Azimzai Y, Lu DAM, Patterson C;

XX DR WPI; 2001-025022/03.

XX DR N-PSDB; AAC84302.

XX PT New human extracellular signaling nucleic acids and polypeptides useful

XX PT for diagnosing, treating and preventing infections and gastrointestinal,

XX PT neurological, reproductive, and autoimmune/inflammatory disorders.

XX PS Claim 1; Page 88-89; 114pp; English.

XX CC The invention provides human extracellular signaling molecules (EXCS) and

XX CC polynucleotides which identify and encode EXCS. EXCS can be expressed by

XX CC standard recombinant methodology. The amino acid and nucleic acid

XX CC sequences of EXCS are useful for diagnosing, treating and preventing

XX CC infections and gastrointestinal (peptic ulcer, dysphagia, pancreatitis),

XX CC neurological (e.g. epilepsy, ischemic cerebrovascular disease, stroke),

XX CC reproductive (infertility, ovulatory defects, endometriosis), autoimmune

XX CC /inflammatory (actinic keratosis, acquired immunodeficiency syndrome

XX CC (AIDS), Addison's disease), and cell proliferative disorders including

XX CC cancers (of the breast, adrenal gland, bone). They may also be used to

XX CC treat fatal familial insomnia, nutritional and metabolic diseases of the

XX CC nervous system, myopathies, mental disorders (anxiety, schizophrenia,

XX CC mood), as well as infections caused by parasites (malaria, leishmania,

XX CC trypanosoma), viral (adenovirus, coronavirus, flavivirus), bacterial

XX CC (e.g. pneumococcus, staphylococcus, bacillus), and fungal (aspergillus,

XX CC blastomycetes, dermatophytes) agents. The nucleic acids, polypeptides,

XX CC antagonists, agonists, pharmaceutical compositions, and antibodies may

XX CC also be used for treating or preventing disorders associated with

XX CC increased or decreased expression or activity of EXCS. EXCS

XX CC polynucleotides may also be used to detect and quantify gene expression

XX CC in biopsied tissues in which expression of EXCS may be correlated with

XX CC the disease, to determine presence or excess expression of EXCS, to

XX CC monitor regulation of EXCS levels during therapeutic intervention, to

XX CC detect the presence of associated disorders, as targets in microarray, to

XX CC generate hybridization probes, and to detect differences in gene

XX CC sequences among normal, carrier or affected individuals. Antibodies may

XX CC also be used in diagnosing disorders, in monitoring patients being

XX CC treated with EXCS agonists, antagonists or inhibitors. Sequences AAB48057

XX CC -B48082 represent the EXCS of the invention

XX SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNMLASHGLGPP 60

Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

32 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNMLASHGLGPP 91

QY 61 DSLLSYPANYSDDSKIRPVEIF 83

Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

92 DSLLSYPANYSDDSKIRPVEIF 114

RESULT 5

ABU03563

ID ABU03563 standard; protein; 182 AA.

XX AC ABU03563;

XX DT 21-JAN-2003 (first entry)

XX DE Angiogenesis-associated human protein sequence #108.

XX KW Human; angiogenesis-associated transcript; angiogenesis;

XX KW angiogenesis-associated disease; cancer; cytostatic.

XX OS Homo sapiens.

XX PN WO200279492-A2.

XX PD 10-OCT-2002.

XX PF 14-FEB-2002; 2002WO-US004915.

XX PR 14-FEB-2001; 2001US-00784356.

XX PR 22-FEB-2001; 2001US-00791390.

XX PR 19-APR-2001; 2001US-0285475P.

XX PR 03-AUG-2001; 2001US-0310025P.

XX PR 13-NOV-2001; 2001US-0350666P.

XX PR 29-NOV-2001; 2001US-0334244P.

XX PA (EOSB-) EOS BIOTECHNOLOGY INC.

XX PI Murray R, Glynn R, Watson SR, Aziz N;

XX DR WPI; 2003-040681/03.

XX DR N-PSDB; ABX08847.

PT Detecting angiogenesis-associated transcript in a cell for diagnosing and

PT treating cancer by contacting a sample with a polynucleotide that

PT exhibits changes in expression level as a function of time in tissue

PT undergoing angiogenesis.

XX PS Example 2; Page 282; 291pp; English.

XX CC The present invention relates to methods and compositions for detecting

XX CC an angiogenesis-associated transcript in a cell in a patient. The method

XX CC involves contacting a biological sample from the patient with a

XX CC polynucleotide that selectively hybridizes to a sequence at least 80%

XX CC identical to any of the angiogenesis-associated human polynucleotide

XX CC sequences given in the specification. These angiogenesis-associated

XX CC polynucleotide sequences comprise genes that exhibit changes in

XX CC expression levels as a function of time in tissue undergoing

XX CC angiogenesis. The method and the polynucleotide sequences of the

XX CC invention are useful for diagnosing and treating angiogenesis and

XX CC angiogenesis-associated diseases e.g. cancer. The polynucleotide

XX CC sequences are also useful in the gene therapy of such disorders. The

XX CC angiogenesis-associated proteins encoded by the polynucleotide sequences

XX CC are useful as a vaccine for therapeutic and prophylactic immunisation.

XX CC ABU03456-ABU03563 represent angiogenesis-associated protein sequences

XX SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEASSLSLPQVRCSTSYNFGRTFLGLDKCNACIGTICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LEASSLSLPQVRCSTSYNFGRTFLGLDKCNACIGTICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DSLSYPANYSDDSKIWRPVEIF 83
Db 92 DSLSYPANYSDDSKIWRPVEIF 114

RESULT 6
ABO17701
ID ABO17701 standard; protein; 182 AA.
XX
AC ABO17701;
XX
DT 26-AUG-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
KW antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
KW TNF-alpha release; cell proliferation; cell differentiation;
KW gene expression modulator; proteoglycan release; cytokine release;
KW tumour; inflammatory disease; organ failure; atherosclerosis;
KW cardiac injury; infertility; birth defect; premature aging; AIDS;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
KW bioreactor; tissue typing.

OS Homo sapiens.
XX
PN US2003032156-A1.
XX
PD 13-FEB-2003.
PF
XX 06-MAY-2002; 2002US-00140474.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 05-JAN-2000; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 05-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 03-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WL, Zhang Z;
XX WPI; 2003-341980/32.
DR N-PSDB; ACD23938.

XX New secreted and transmembrane PRO nucleic acids, for treating
PT inflammation, organ failure, atherosclerosis, cardiac injury,
PT infertility, birth defects, premature aging, acquired immunodeficiency
PT syndrome (AIDS), or cancer.
XX
PS Claim 12; Fig 172; 660pp; English.
XX
CC The invention describes an isolated nucleic acid (I) comprising, or which
CC has 80 % sequence identity to, or the full-length coding sequence of, one
CC of 275 nucleotide sequences, and which encodes a corresponding
CC polypeptide selected from 275 amino acid sequences, where all sequences
CC are given in the specification. The polypeptide encoded by (I) is used to
CC detect PRO polypeptides, link a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulate a biological activity of a cell, stimulate the
CC release of tumour necrosis factor (TNF)-alpha from human blood, modulate
CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit
CC the proliferation or differentiation of cells or gene expression,
CC stimulate the release of proteoglycans, stimulate the release of cytokine
CC from peripheral blood mononuclear cells, inhibit the binding of A-peptide
CC to factor VIIA, or detect the presence of tumour in a mammal. The nucleic
CC acid and polypeptide encoded by it, are useful for treating inflammatory
CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,
CC birth defects, premature aging, acquired immunodeficiency syndrome
CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as
CC hybridisation probes, in chromosome and gene mapping, and in generating
CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,
CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.
CC This is the amino acid sequence of a novel human secreted and
CC transmembrane PRO polypeptide
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKPFKEIRSDNWLASHLGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKPFKEIRSDNWLASHLGLPP 91
QY 61 DSLLSYPANYSDDSKIWRPVEIF 83
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
92 DSLLSYPANYSDDSKIWRPVEIF 114

RESULT 7
ABU80955
ID ABU80955 standard; protein; 182 AA.
XX
AC ABU80955;
XX
DT 23-JUN-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO polypeptide; secreted and transmembrane protein;
KW anti-PRO antibody; diagnostic assay; gene expression; diabetes;
KW bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
KW sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
KW hearing loss; coagulation disorder; stroke; heart attack; cardiac;
KW antidiabetic; anorectic; vulnery; antiarthritic; osteopathic;
KW antirheumatic; auditory; cerebroprotective; angiogenic.
XX
OS Homo sapiens.
XX
PN US2003004311-A1.
XX
PD 02-JAN-2003.
XX
PF 19-DEC-2001; 2001US-00028072.
XX
PR 18-JUN-1997; 97US-0049911P.

PR 26-AUG-1997; 97US-0056974P.
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 19-SEP-1997; 97US-0059352P.
PR 19-SEP-1997; 97US-0059588P.
PR 24-SEP-1997; 97US-0059836P.
PR 17-OCT-1997; 97US-0062250P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 17-OCT-1997; 97US-0063755P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063082P.
PR 27-OCT-1997; 97US-0063127P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063561P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063733P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 11-DEC-1997; 97US-0069212P.
PR 11-DEC-1997; 97US-0069278P.
PR 11-DEC-1997; 97US-0069334P.
PR 16-DEC-1997; 97US-0069694P.
PR 23-JAN-1998; 98US-0072320P.
PR 04-FEB-1998; 98US-0073612P.
PR 09-FEB-1998; 98US-0074086P.
PR 09-FEB-1998; 98US-0074092P.
PR 12-MAR-1998; 98US-0077791P.
PR 20-MAR-1998; 98US-0078910P.
PR 25-MAR-1998; 98US-0079294P.
PR 27-MAR-1998; 98US-0079663P.
PR 31-MAR-1998; 98US-0080165P.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US030095.
PR 16-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.

(GETH) GENENTECH INC.

PI Baker KP, Berasini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX

DR WPI; 2003-352836/33.
DR N-PSDB; ACA67079.

XX
PT New isolated PRO polypeptide useful for treating diabetes, rheumatoid
PT arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
PT heart attack.

XX Claim 12; Fig 172; 643pp; English.

XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides and polynucleotides are useful for preparing a medicament
CC useful in the treatment of diabetes, bone and/or cartilage disorders
CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
CC hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
CC assays for PRO, by detecting its expression in specific cells, tissues or
CC serum, and for affinity purification of PRO from recombinant cell culture
CC or natural sources. ABU80870-ABU81144 represent the human PRO
CC polypeptides of the invention. Note: The sequence data for this patent
CC was obtained in electronic format directly from the USPTO web site at
CC seqdata.uspto.gov/psipsDIDEntry.html

XX Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHGLGPP 60

Db 32 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHGLGPP 91

QY 61 DSSLSPANYSDSDSKIMRPVEIF 83

Db 92 DSSLSPANYSDSDSKIMRPVEIF 114

RESULT 8

ABU66655
ID ABU66655 standard; protein; 182 AA.
XX
AC ABU66655;
XX
DT 23-MAY-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO polypeptide; secreted and transmembrane protein;
KW tumour necrosis factor-alpha; TNF-alpha; blood; proliferation;
KW differentiation; chondrocyte; tumour; genetic disorder; cytostatic.
XX
OS Homo sapiens.
XX
PN US2003036180-A1.
XX
PD 20-FEB-2003.
XX
PF 29-MAY-2002; 2002US-00143114.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.

02-MAR-2000; 2000WO-US005841.
10-MAR-2000; 2000WO-US006319.
15-MAR-2000; 2000WO-US006884.
20-MAR-2000; 2000WO-US007377.
21-MAR-2000; 2000WO-US007532.
30-MAR-2000; 2000WO-US008439.
17-MAY-2000; 2000WO-US013705.
22-MAY-2000; 2000WO-US014042.
30-MAY-2000; 2000WO-US014941.
02-JUN-2000; 2000WO-US015264.
28-JUL-2000; 2000WO-US020710.
11-AUG-2000; 2000WO-US022031.
23-AUG-2000; 2000WO-US023522.
24-AUG-2000; 2000WO-US023328.
08-NOV-2000; 2000WO-US030952.
10-NOV-2000; 2000WO-US030873.
01-DEC-2000; 2000WO-US032678.
20-DEC-2000; 2000US-00747259.
20-DEC-2000; 2000WO-US034956.
28-FEB-2001; 2001US-00796498.
28-FEB-2001; 2001WO-US006520.
01-MAR-2001; 2001WO-US006666.
09-MAR-2001; 2001US-00802706.
14-MAR-2001; 2001US-00808689.
22-MAR-2001; 2001US-00816744.
05-APR-2001; 2001US-00828366.
10-MAY-2001; 2001US-00854208.
10-MAY-2001; 2001US-00854280.
18-MAY-2001; 2001US-00860216.
25-MAY-2001; 2001US-00866028.
25-MAY-2001; 2001US-00866034.
25-MAY-2001; 2001WO-US017092.
01-JUN-2001; 2001US-00872035.
01-JUN-2001; 2001WO-US017800.
05-JUN-2001; 2001US-00874503.
14-JUN-2001; 2001US-00882636.
19-JUN-2001; 2001US-00886342.
20-JUN-2001; 2001WO-US019692.
21-JUN-2001; 2001US-00887879.
22-JUN-2001; 2001WO-US020116.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00927796.
16-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski EJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-332040/31.
N-PSDB; ACA33688.

New secreted and transmembrane PRO nucleic acids, useful for gene therapy, in chromosome and gene mapping, as chromosome markers, in tissue typing, and in chromosome identification.

Claim 12; Fig 172; 660pp; English.

The present invention relates to the isolation of novel human PRO polypeptides, and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, and for biological activities of cells expressing PRO polypeptides, and for identifying agonists or antagonists. The PRO polypeptides are useful for stimulating the release of tumour necrosis factor (TNF)-alpha from human blood, for stimulating the proliferation or differentiation of chondrocytes, and detecting the presence of tumours. The polynucleotide

CC sequences encoding PRO polypeptides are useful as hybridisation probes,
CC in chromosome and gene mapping, in the generation of antisense RNA and
CC DNA, in the preparation of PRO polypeptides, for generating transgenic
CC animals or knockout animals, for the genetic analysis of individuals with
CC genetic disorders, and in gene therapy. ABU66570-ABU66844 represent the
CC human PRO polypeptides of the invention. Note: The sequence data for this
CC patent was obtained in electronic format directly from the USPTO web site
CC at seqdata.uspto.gov/psipdsIDEntry.html

XX SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91
Qy 61 DSLSSYPANYSDDSKIWRPVEIF 83
Db 92 DSLSSYPANYSDDSKIWRPVEIF 114

RESULT 9

ABU59736

ID ABU59736 standard; protein; 182 AA.

XX AC ABU59736;

XX DT 13-MAY-2003 (first entry)

XX DB Novel secreted and transmembrane protein PRO3743.

Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing;
cardiac insufficiency disorder; cancer; tumour; immune response;
adrenal cortical capillary endothelial growth; c-fos induction;
vascular endothelial growth factor inhibition; VEGF inhibition;
endothelial cell growth inhibitor; T-lymphocytes stimulation;
retinal neurons cell survival; rod photoreceptor cell survival;
retinal disorder; retinitis pigmentosa; kidney disorder;
mammalian kidney mesangial cell proliferation; Berger disease;
dermatitis; herpeticiformis; Crohn's disease; chondrocyte proliferation;
chondrocyte redifferentiation; sports injury; arthritis.

OS Homo sapiens.

XX US2003017563-A1.

XX PD 23-JAN-2003.

XX PF 07-MAY-2002; 2002US-00140808.

XX PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 16-SEP-1998; 98WO-US019177.

PR 17-SEP-1998; 98WO-US019330.

PR 07-OCT-1998; 98WO-US019437.

PR 29-OCT-1998; 98WO-US021141.

PR 29-OCT-1998; 98WO-US022991.

PR 20-NOV-1998; 98WO-US022992.

PR 01-DEC-1998; 98WO-US024855.

PR 05-JAN-1999; 98WO-US025108.

PR 08-MAR-1999; 99WO-US000106.

PR 10-MAR-1999; 99WO-US005028.

PR 20-APR-1999; 99WO-US005190.

PR 14-MAY-1999; 99WO-US008615.

PR 99WO-US010733.

DT 12-JUN-2003 (first entry)

XX Breast cancer associated protein sequence SEQ ID NO:150.

DZ Human; breast cancer; cytostatic; gene therapy.

KW Homo sapiens.

XX WO2003004989-A2.

XX 16-JAN-2003.

XX 21-JUN-2002; 2002WO-US019669.

XX 21-JUN-2001; 2001US-0299887P.

XX 27-JUN-2001; 2001US-0301572P.

XX 18-JUL-2001; 2001US-0306501P.

XX 25-SEP-2001; 2001US-0325002P.

XX 05-MAR-2002; 2002US-0362585P.

XX 14-MAY-2002; 2002US-0380391P.

XX (MILL-) MILLENIUM PHARM INC.

XX Lillie J, Gannavarapu M, Glatt K, Hoerth S, Kamatkar S,

XX Mertens M, Monahan JE, Myer V, Wang Y, Xu Y, Zhao X, Meyers RE;

XX East RC, Hortobagyi GN, Puszta L, Meric F, Sahin A, Mills GB;

XX WPI; 2003-2:0381/20.

XX N-PSDB; ACC50151.

XX Breast cancer diagnosis or treatment by comparing the level of expression

XX of a marker in a patient sample with that in the control non-breast

XX cancer sample.

XX Claim 1; SEQ ID NO 150; 128pp; English.

XX The present invention describes a method for assessing whether a patient

XX is afflicted with breast cancer. The method comprises comparing the level

XX of expression of a marker (gene/polypeptide see ACC50076 to ACC50334 and

XX ABR47386 to ABR47632) in a patient sample and the normal level of

XX expression of the marker in a control non-breast cancer sample, where a

XX significant increase in the level of expression of the marker in the

XX patient sample and the normal level is an indication that the patient is

XX afflicted with breast cancer. The breast cancer associated sequences from

XX the present invention have cytostatic activities and can be used in gene

XX therapy. The method is useful for diagnosing and treating breast cancer.

XX N.B. The sequence data for this patent did not form part of the printed

XX specification, but was obtained in electronic format directly from WIPO

XX at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 182 AA;

XX Query Match 100.0%; Score 444; DB 6; Length 182;

XX Best Local Similarity 100.0%; Pred. No. 1.6e-46;

XX Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 60

Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

32 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 91

Qy 61 DSLLSYPNYSDDSKIWRPVEIF 83

Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 11

ABO24926

ID ABO24926 standard; protein; 182 AA.

XX AC ABO24926;

XX DT 05-SEP-2003 (first entry)

XX

DE

XX

KW

KW

KW

KW

KW

KW

KW

XX

OS

XX

XX

PN

XX

PD

XX

XX

PF

XX

XX

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-466355/44.
DR N-PSDB; ACD41880.
XX
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 12; Fig 172; 659pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising at least 80%
CC sequence identity to a PRO (secreted and transmembrane protein) cDNA
CC comprising a nucleic acid (a) encoding a PRO polypeptide, or its
CC extracellular domain (with or without its associated signal peptide),
CC which comprises any of the 275 120-850 residue amino acid sequences,
CC given in the specification; (b) comprising any of the 275 300-3500
CC nucleotide sequences, given in the specification; or (c) comprising the
CC full-length coding sequence of the nucleotide sequences given in the
CC specification, or of the DNA deposited under any of the American Type
CC Culture Collection (ATCC) Accession Numbers listed in the specification.
CC Also included are a vector comprising the novel nucleic acid, a host cell
CC comprising the vector, producing a PRO polypeptide, the isolated PRO
CC polypeptides detailed above, a chimaeric molecule comprising the PRO

CC polypeptide of fused to a heterologous amino acid sequence, an anti-PRO
CC antibody, detecting a PRO polypeptide in a sample suspected of containing
CC the PRO polypeptide, linking a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulating at least one biological activity of a cell
CC expressing a PRO polypeptide, stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, (or proteoglycans from
CC cartilage or cytokine from peripheral blood mononuclear cells (PBMC)),
CC modulating the uptake of glucose or FFA by skeletal muscle cells or
CC adipocyte cells, stimulating the proliferation or differentiation of
CC chondrocyte cells (or proliferation of or gene expression in pericyte
CC cells (or of T-lymphocyte cells, or of endothelial cells), inhibiting the
CC binding of A-peptide to factor VIIA, or differentiation of adipocyte
CC cells, detecting the presence of a tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences given
CC in the specification. The polynucleotide is useful in molecular biology,
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC in generating antisense RNA and DNA, and in gene therapy. The
CC polynucleotide may also be used in preparing PRO polypeptides by
CC recombinant techniques, and in generating either transgenic animals or
CC knock-out animals which, in turn, are useful in the development and
CC screening of therapeutically useful reagents. The PRO polypeptide or the
CC antibody is used in preparing a medicament for treating a condition
CC responsive to the polypeptide or antibody, such as tumours, and in
CC various diagnostic assays. The present sequence represents a PRO
CC polypeptide
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPFFKEIRSDNWLASHLGLPP 60
Db |||||
Qy 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPFFKEIRSDNWLASHLGLPP 91
Db |||||
Qy 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db |||||
Qy 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 12
ABU66931

ID ABU66931 standard; protein; 182 AA.

XX AC ABU66931;

XX DT 27-MAY-2003 (first entry)

XX DE Human secreted/transmembrane, PRO, protein SEQ ID 172.

XX KW Human; secreted protein; transmembrane protein; PRO;
KW inflammatory disease; organ failure; atherosclerosis; cardiac injury;
KW infertility; birth defects; premature aging; AIDS; biosensor;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW bioreactor; tumour.

XX OS Homo sapiens.

XX PN US2003032155-A1.

XX PD 13-FEB-2003.

XX PF 03-MAY-2002; 2002US-00137865.

XX PR 31-MAR-1997; 97WO-US005230.

XX PR 12-JUN-1998; 98WO-US012456.

XX PR 14-JUL-1998; 98WO-US014552.

XX PR 28-AUG-1998; 98WO-US017888.

XX PR 10-SEP-1998; 98WO-US018824.

XX PR 14-SEP-1998; 98WO-US019093.

XX PR 14-SEP-1998; 98WO-US019094.

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. NO. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 LPASSLSLPVQVRSYFNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
 Db 32 LPASSLSLPVQVRSYFNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91
 Cy 61 DSSLSPANYSDSDSKIRPVEIF 83
 Db 92 DSSLSPANYSDSDSKIRPVEIF 114

RESULT 13
 ADA45691
 ID ADA45691 standard; protein; 182 AA.
 XX
 AC ADA45691;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Novel human secreted and transmembrane protein PRO3743.
 XX
 KW Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW glucose uptake modulator; FFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;
 KW cell differentiation inhibitor; cytokine release stimulator; tumour;
 KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
 KW gene therapy; chromosome identification; chromosome marker.
 XX

OS Homo sapiens.

XX US2003022328-A1.

XX 30-JAN-2003.

XX 16-APR-2002; 2002US-00123904.

PR 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WC-US014552.
 PR 28-AUG-1998; 98WC-US017888.
 PR 10-SEP-1998; 98WC-US018824.
 PR 14-SEP-1998; 98WC-US019093.
 PR 14-SEP-1998; 98WC-US019094.
 PR 14-SEP-1998; 98WC-US019177.
 PR 16-SEP-1998; 98WC-US019330.
 PR 17-SEP-1998; 98WC-US019437.
 PR 07-OCT-1998; 98WC-US021141.
 PR 29-OCT-1998; 98WC-US022991.
 PR 29-OCT-1998; 98WC-US022992.
 PR 20-NOV-1998; 98WC-US024855.
 PR 01-DEC-1998; 98WC-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.

PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 11-FEB-2000; 2000WO-US000376.
 PR 18-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00865028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 29-JUN-2001; 2001WO-US020116.
 PR 09-JUL-2001; 2001WO-US021066.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 PA (GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-584997/55.
 DR N-PSDB; ADA45690.
 XX
 PT Novel secreted and transmembrane polypeptide for modulating biological

PT activity of cell expressing the polypeptide, identifying agonists or
PT antagonists of polypeptide, and as molecular weight markers.
XX Claim 12; Fig 172; 659pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db |||||
32 LPASSLSLVPQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSLSSYPANYSDDSKIWRPVEIF 83
Db |||||
92 DSLSSYPANYSDDSKIWRPVEIF 114

RESULT 14
ADA76122
ID ADA76122 standard; protein; 182 AA.
XX
AC ADA76122;

DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.

KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX Homo sapiens.

PN US2003073212-A1.
XX
PD 17-APR-2003.
XX
PF 16-APR-2002; 2002US-00123903.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.

PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-687639/65.
DR N-PSDB; ADA76121.

XX New isolated nucleic acid encoding a secreted and transmembrane
PT polypeptide, designated e.g. PRO1114 or PRO4978, useful in chromosome and
PT gene mapping, in generating antisense RNA and DNA, and in gene therapy.
XX Claim 12; Fig 172; 659pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans

CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

SQ Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db |||||
32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91
OY 61 DSISSYPANYSDDSKIWRPVEIF 83
Db |||||
92 DSISSYPANYSDDSKIWRPVEIF 114

RESULT 15

ADA18772

ID ADA18772 standard; protein; 182 AA.

XX AC ADA18772;

XX DT 20-NOV-2003 (first entry)

XX DE Human PRO polypeptide #86.

XX KW Human; PRO; secreted polypeptide; transmembrane polypeptide;

XX KW tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; lung;

XX KW colon; breast; prostate; rectum; cervix; liver; tumour; cancer;

XX KW glucose uptake; FFA; adipocyte cell; pericyte cell; proteoglycan;

XX KW cartilage; inner ear utricular supporting cell; cytokine; A-peptide;

XX KW factor VIIA; endothelial cell.

OS Homo sapiens.

XX US2003054517-A1.

XX PD 20-MAR-2003.

XX PF 08-MAY-2002; 2002US-00141755.

XX PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 16-SEP-1998; 98WO-US019177.

PR 17-SEP-1998; 98WO-US019330.

PR 07-OCT-1998; 98WO-US021141.

PR 29-OCT-1998; 98WO-US022991.

PR 23-OCT-1998; 98WO-US022992.

PR 20-NOV-1998; 98WO-US024855.

PR 01-DEC-1998; 98WO-US025108.

PR 05-JAN-1999; 99WO-US000106.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 20-APR-1999; 99WO-US008615.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013795.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.

PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-521854/49.
DR N-PSDB; ADA18771.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumors.
XX
PS Claim 12; Fig 172; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. lung, colon, breast,
CC prostate, rectal, cervical and liver tumours). The polynucleotides are
CC useful in molecular biology, including uses as hybridisation probes, in
CC chromosome and gene mapping, in generating antisense RNA and DNA and in
CC gene therapy. The polynucleotides may also be used in preparing PRO
CC polypeptides by recombinant techniques and in generating either
CC transgenic animals or knock-out animals which are useful in the
CC development and screening of therapeutically useful reagents. The PRO
CC polypeptides or antibodies are used in preparing a medicament for
CC treating a condition responsive to the polypeptides or antibodies, such
CC as tumours, for modulating the uptake of glucose or FFA by adipocyte
CC cells, for stimulating the proliferation of or gene expression in
CC pericyte cells, for stimulating the release of proteoglycans from
CC cartilage, for stimulating the proliferation of inner ear utricular
CC supporting cells, for stimulating the release of cytokines from PBMC
CC cells, for inhibiting the binding of A-peptide to factor VIIA, for
CC inhibiting the differentiation of adipocyte cells and for stimulating the
CC proliferation of endothelial cells. This sequence represents a human PRO
CC polypeptide of the invention. Note: The sequence data for this patent is
CC also available in electronic format from USPTO at
CC seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db |||||
32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDDSKIRPVEIF 83
Db |||||
92 DSSLSPANYSDDSKIRPVEIF 114

RESULT 16
ADA61395
ID ADA61395 standard; protein; 182 AA.
XX
AC ADA61395;
XX
DT 20-NOV-2003 (first entry)
XX Homo sapiens.
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;

KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX

OS Novel.
OS human.
OS secreted.
OS and.
OS transmembrane.
OS protein.
OS PRO3743.
XX

PN US2003049816-A1.

XX 13-MAR-2003.

PF 15-APR-2002; 2002US-00123262.

XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US013733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00865028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 05-JUN-2001; 2001WO-US017800.
PR 14-JUN-2001; 2001US-00874503.
PR 19-JUN-2001; 2001US-00882636.
PR 20-JUN-2001; 2001US-00886342.
PR 21-JUN-2001; 2001WO-US019692.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CX, Wood WI, Zhang Z;

WPI; 2003-695892/66.
N-PSDB; ADA61394.

New PRO nucleic acid and encode polypeptides, are useful for
manufacturing a medicament for diagnosing or treating cancer.

Claim 12; Fig 172; 660pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and
transmembrane) polypeptides (I). (I) is useful for stimulating the
release of TNF-alpha from human blood, for modulating the uptake of
glucose or FFA by skeletal muscle cells or adipocyte cells, for
stimulating the proliferation or differentiation of chondrocyte cells,
for stimulating the proliferation of or gene expression in pericyte
cells, for stimulating the release of proteoglycans from cartilage, for
stimulating the proliferation of inner ear utricular supporting cells,
for stimulating the proliferation of T-lymphocyte cells, for stimulating
the release of a cytokine from PBMC cells, for inhibiting the binding of
A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
cells, for stimulating proliferation of endothelial cells, for detecting

CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, recta, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DLSLSYPANYSDDSKIWRPVEIF 83
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
92 DLSLSYPANYSDDSKIWRPVEIF 114

RESULT 17
ADE19180
ID ADE19180 standard; protein; 182 AA.
XX
AC ADE19180;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release.

OS Homo sapiens.
XX
XX US2003068796-A1.
XX
PD 10-APR-2003.
XX
PF 15-APR-2002; 2002US-00123261.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.

PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 01-JUN-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.

AC ADA86200;
XX
DT 20-NOV-2003 (first entry)
XX
XX Novel human secreted and transmembrane protein PRO3743.
DE
XX Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
XX Homo sapiens.
XX
XX US2003082711-A1.
XX
XX 01-MAY-2003.
XX
XX 16-MAY-2002; 2002US-00147508.
XX
XX 02-JUL-1998; 98US-0091519P.
PR 02-JUN-1999; 99WO-US012252.
PR 07-JUL-1999; 99US-0143048P.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
XX (GETH) GENENTECH INC.
PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-786914/74.
DR N-PSDB; ADA86199.
DR
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
XX Claim 12; Fig 172; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO

CC polypeptide.
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DLSLSYPANYSDDSKIMRPVEIF 83
Db 92 DLSLSYPANYSDDSKIMRPVEIF 114
RESULT 20
ADBI5764
ID ADBI5764 standard; protein; 182 AA.
XX
AC ADBI5764;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087350-A1.
XX
XX 08-MAY-2003.
XX
XX 22-APR-2002; 2002US-00127821.
XX
XX 04-AUG-1998; 98US-0095301P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
XX (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-786941/74.
DR N-PSDB; ADBI5763.
XX
XX New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
XX Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASLSLVPQVQRTSYNFGRTFLGDKCNACIGTSICKFFKEIRSDNWLAHLGLPP 60
Db 32 LPASLSLVPQVQRTSYNFGRTFLGDKCNACIGTSICKFFKEIRSDNWLAHLGLPP 91
Qy 61 DLSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DLSLLSYPNYSDDSKIWRPVEIF 114

RESULT 21
ADA47550
ID ADA47550 standard; protein; 182 AA.
XX
AC ADA47550;
XX
DE 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003073215-A1.
XX
PD 17-APR-2003.
XX
PF 07-MAY-2002; 2002US-00140925.
XX
PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 98WO-US000106.
PR 08-MAR-1999; 98WO-US005028.
PR 10-MAR-1999; 98WO-US005190.
PR 20-APR-1999; 98WO-US008615.
PR 14-MAY-1999; 98WO-US010733.
PR 02-JUN-1999; 98WO-US012252.
PR 01-SEP-1999; 98WO-US020111.
PR 08-SEP-1999; 98WO-US020594.
PR 13-SEP-1999; 98WO-US020944.
PR 15-SEP-1999; 98WO-US021090.
PR 15-SEP-1999; 98WO-US021547.
PR 05-OCT-1999; 98WO-US023089.
PR 29-NOV-1999; 98WO-US028214.
PR 30-NOV-1999; 98WO-US028313.
PR 30-NOV-1999; 98WO-US028409.
PR 01-DEC-1999; 98WO-US028301.
PR 01-DEC-1999; 98WO-US028634.
PR 02-DEC-1999; 98WO-US028551.
PR 02-DEC-1999; 98WO-US028564.
PR 02-DEC-1999; 98WO-US028565.
PR 16-DEC-1999; 98WO-US030095.
PR 20-DEC-1999; 98WO-US030911.
PR 20-DEC-1999; 98WO-US030999.
PR 22-DEC-1999; 98WO-US030720.
PR 30-DEC-1999; 98WO-US031243.
PR 30-DEC-1999; 98WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.

PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

FI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
FI Gerritsen YE, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-644801/61.
DR N-PSDB; ADA47549.

XX New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, detecting the presence of tumor in a mammal, or
PT modulating the uptake of glucose or free fatty acid by skeletal muscle
PT cells or adipocyte cells.

XX Claim 12; Fig 172; 659pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumor necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems.
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The

DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
XX US2003068794-A1.
XX
XX 10-APR-2003.
XX
XX 15-APR-2002; 2002US-00123155.
XX
XX 31-MAR-1997; 97WO-US005230.
XX 12-JUN-1998; 98WO-US012456.
XX 14-JUL-1998; 98WO-US014552.
XX 28-AUG-1998; 98WO-US017888.
XX 10-SEP-1998; 98WO-US018824.
XX 14-SEP-1998; 98WO-US019093.
XX 14-SEP-1998; 98WO-US019094.
XX 14-SEP-1998; 98WO-US019177.
XX 16-SEP-1998; 98WO-US019330.
XX 17-SEP-1998; 98WO-US019437.
XX 07-OCT-1998; 98WO-US021141.
XX 29-OCT-1998; 98WO-US022991.
XX 29-OCT-1998; 98WO-US022992.
XX 20-NOV-1998; 98WO-US024855.
XX 01-DEC-1998; 98WO-US025108.
XX 05-JAN-1999; 99WO-US000106.
XX 08-MAR-1999; 99WO-US005028.
XX 10-MAR-1999; 99WO-US005190.
XX 20-APR-1999; 99WO-US008615.
XX 14-MAY-1999; 99WO-US010733.
XX 02-JUN-1999; 99WO-US012252.
XX 01-SEP-1999; 99WO-US020111.
XX 08-SEP-1999; 99WO-US020594.
XX 13-SEP-1999; 99WO-US020944.
XX 15-SEP-1999; 99WO-US021090.
XX 15-SEP-1999; 99WO-US021547.
XX 05-OCT-1999; 99WO-US023089.
XX 29-NOV-1999; 99WO-US028214.
XX 30-NOV-1999; 99WO-US028313.
XX 30-NOV-1999; 99WO-US028409.
XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 02-DEC-1999; 99WO-US028551.
XX 02-DEC-1999; 99WO-US028564.
XX 02-DEC-1999; 99WO-US028565.
XX 16-DEC-1999; 99WO-US030095.
XX 20-DEC-1999; 99WO-US030911.
XX 20-DEC-1999; 99WO-US030999.
XX 22-DEC-1999; 99WO-US030720.
XX 30-DEC-1999; 99WO-US031243.
XX 30-DEC-1999; 99WO-US031274.
XX 05-JAN-2000; 2000WO-US000219.
XX 06-JAN-2000; 2000WO-US000277.
XX 06-JAN-2000; 2000WO-US000376.
XX 11-FEB-2000; 2000WO-US000365.
XX 18-FEB-2000; 2000WO-US004341.
XX 18-FEB-2000; 2000WO-US004342.
XX 22-FEB-2000; 2000WO-US004414.
XX 24-FEB-2000; 2000WO-US004914.
XX 24-FEB-2000; 2000WO-US005004.
XX 01-MAR-2000; 2000WO-US005601.
XX 02-MAR-2000; 2000WO-US005746.

PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
XX (GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
WPI; 2003-708391/67.
N-PSDB; ADB30351.

New isolated PRO polypeptides e.g. PRO1801 and PRO1114, useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide, and as therapeutic agents e.g. vaccines.

Claim 12; Fig 172; 660pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating

antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the USPTO website at seqdata.uspto.gov.

Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
Qy 61 DSSLSPANYSDSKIWPRVEIF 83
Db 92 DSSLSPANYSDSKIWPRVEIF 114

RESULT 24

ADA85648

ID ADA85648 standard; protein; 182 AA.

XX ADA85648;

XX 20-NOV-2003 (first entry)

XX Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX Homo sapiens.

XX US2003082693-A1.

XX 01-MAY-2003.

XX 22-APR-2002; 2002US-00127843.

XX 05-JUN-2000; 2000US-0209832P.

XX 01-DEC-2000; 2000WO-US032678.

XX 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-786907/74.
DR N-PSDB; ADA85647.
XX New PRO nucleic acid, useful for preparing a composition for treating e.g., tumor or for tissue typing.
PS Claim 12; Fig 172; 637pp; English.

XX The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the release of a cytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide.

Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
Qy 61 DSSLSPANYSDSKIWPRVEIF 83
Db 92 DSSLSPANYSDSKIWPRVEIF 114

RESULT 25

ADA96860

ID ADA96860 standard; protein; 182 AA.

XX ADA96860;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;

KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.

XX US2003082705-A1.

XX 01-MAY-2003.

XX 24-APR-2002; 2002US-00131829.

XX 09-DEC-1999; 99US-0170262P.

PR 01-DEC-2000; 2000WO-US032678.

PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-755112/71.

DR N-PSDB; ADA96859.

XX New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 100.0%; Score 444; D3 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60

DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

QY 61 DSSLSPYANYSDSDSKIMRPVEIF 83
DB 92 DSSLSPYANYSDSDSKIMRPVEIF 114

RESULT 26

ADA79164

ID ADA79164 standard; protein; 182 AA.

XX AC ADA79164;

XX DT 20-NOV-2003 (first entry)

XX DE Human PRO polypeptide #86.

XX KW Human; PRO; secreted polypeptide; transmembrane polypeptide;

XX KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

XX KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

XX KW liver; microvascular endothelial cell; glucose; FFA;

XX KW skeletal muscle cell; adipocyte cell; pericyte cell;

XX KW inner ear utricular supporting cell; T-lymphocyte cell;

XX KW endothelial cell tube formation; bone disorder; cartilage disorder;

XX KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

XX KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

XX KW immune system cell infiltration.

XX OS Homo sapiens.

XX PN US2003082763-A1.

XX PD 01-MAY-2003.

XX PF 17-APR-2002; 2002US-00124818.

XX PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98WO-US019437.

PR 07-OCT-1998; 98WO-US021141.

PR 29-OCT-1998; 98WO-US022991.

PR 29-OCT-1998; 98WO-US022992.

PR 20-NOV-1998; 98WO-US024855.

PR 01-DEC-1998; 98WO-US025108.

PR 05-JAN-1999; 99WO-US000106.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 20-APR-1999; 99WO-US008615.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.

PR 05-OCT-1999; 99WO-US023089.

PR 29-NOV-1999; 99WO-US028214.

PR 30-NOV-1999; 99WO-US028313.

PR 30-NOV-1999; 99WO-US028409.

PR 01-DEC-1999; 99WO-US028301.

PR 01-DEC-1999; 99WO-US028634.

PR 02-DEC-1999; 99WO-US028551.

PR 02-DEC-1999; 99WO-US028564.

PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030095.

PR 20-DEC-1999; 99WO-US030911.

PR 20-DEC-1999; 99WO-US030999.

PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen XE, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-755116/71.
DR N-PSDB; ADA79163.

PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
in detection and treatment of cancer and in modulating the uptake of

PT glucose or free fatty acid by skeletal muscle cells or adipocyte cells.
XX Claim 12; Fig 172; 659pp; English.

CC The invention relates to isolated human PRO polypeptides (secreted and
transmembrane polypeptides) and the polynucleotides encoding them. The
invention also relates to an antibody which specifically binds to a PRO
polypeptide, a method for stimulating the release of tumour necrosis
factor-alpha (TNF-alpha) from human blood, a method for stimulating the
proliferation or differentiation of chondrocyte cells and a method for
detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
polynucleotides are useful in molecular biology, including uses as
hybridisation probes, in chromosome and gene mapping, in generating
antisense RNA and DNA and in gene therapy. The polynucleotides may also
be used in preparing PRO polypeptides by recombinant techniques and in
generating either transgenic animals or knock-out animals which are
useful in the development and screening of therapeutically useful
reagents. The PRO polypeptides or antibodies are used in preparing a
medicament for treating a condition responsive to the polypeptides or
antibodies, such as tumours, for stimulating and inhibiting proliferation
of human microvascular endothelial cells, for modulating the uptake of
glucose or FFA by skeletal muscle cells or adipocyte cells, for
stimulating differentiation of adipocyte cells, for stimulating
proliferation of or gene expression in pericyte cells, for stimulating
the proliferation of inner ear utricular supporting cells or T-lymphocyte
cells, for inducing endothelial cell tube formation and for treating
various bone and/or cartilage disorders such as sports injuries and
arthritis. PRO polypeptides which stimulate the release of proteoglycans
from cartilage are useful for treating sports-related joint problems, PRO
articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
polypeptides are also useful for treating various mammalian haemoglobin-
associated disorders such as various thalassaemias and conditions which
may benefit from enhanced local immune system cell infiltration. This
sequence represents a human PRO polypeptide of the invention. Note: The
sequence data for this patent is also available in electronic format from
USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db |||||
QY 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
Db |||||
QY 61 DSLLSYPMYSDSDSKIMRPVEIF 83
Db |||||
QY 92 DSLLSYPMYSDSDSKIMRPVEIF 114

RESULT 27

ADA87303

ID ADA87303 standard; protein; 182 AA.

XX ADA87303;

DT 20-NOV-2003 (first entry)

DE Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX Homo sapiens.

XX US2003087345-A1.
PN 08-MAY-2003.
XX
PD
XX
PF 16-APR-2002; 2002US-00123907.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 10-MAR-1999; 2000WO-US006319.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001US-008919692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WL, Zhang Z;
XX
DR WPI; 2003-786937/74.
DR N-PSDB; ADA87302.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 12; Fig 172; 638pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for

CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPANYSDSKWRPVEIF 83
Db 92 DSLLSYPANYSDSKWRPVEIF 114

RESULT 28
ADBI6505
ID ADBI6505 standard; protein; 182 AA.
XX
AC ADBI6505;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087349-A1.
XX
PD 08-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125928.
XX
PR 19-JUN-1998; 98US-00899472.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 02-MAR-2000; 2000WO-US005841.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
OR WPI; 2003-786940/74.
DR N-PSDB; ADBI6504.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO

CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC the proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPANYSDSKWRPVEIF 83
Db 92 DSLLSYPANYSDSKWRPVEIF 114

RESULT 29
ADA91597
ID ADA91597 standard; protein; 182 AA.
XX
AC ADA91597;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082694-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127845.
XX

PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786908/74.
DR N-PSDB; ADA91596.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT or a composition for treating e.g., tumor or for tissue typing.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumor in a mammal. The tumor is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKPKFKBEIRSDNWLASHLGLPP 60
Db |||||
32 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKPKFKBEIRSDNWLASHLGLPP 91
QY 61 DILLSYPANYSDDSKIWRPVEIF 83
Db |||||
92 DILLSYPANYSDDSKIWRPVEIF 114
RESULT 30
ADB14660
ID ADB14660 standard; protein; 182 AA.
XX
AC ADB14660;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX

KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087351-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127822.
XX
PR 17-JUN-1998; 98US-0089532P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786942/74.
DR N-PSDB; ADB14659.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 61 DSLISYPANYSDDSKIWRPVEIF 83
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
92 DSLISYPANYSDDSKIWRPVEIF 114

Search completed: June 14, 2004, 07:55:49
Job time : 32.9472 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 07:58:31 ; Search time 10.3358 Seconds
(without alignments)
414.572 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114
Perfect score: 444

Sequence: 1 LPASSLSLVPOVRTSYNFG.....LSYPANYSDDSKIWRPVEIF 83

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Issued Patents AA: *
1: /cgn2_6/ptodata/2/iaa/5A COMB.pep: *
2: /cgn2_6/ptodata/2/iaa/5B COMB.pep: *
3: /cgn2_6/ptodata/2/iaa/6A COMB.pep: *
4: /cgn2_6/ptodata/2/iaa/6B COMB.pep: *
5: /cgn2_6/ptodata/2/iaa/PCTUS COMB.pep: *
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	444	100.0	182	4	US-09-904-615-114
2	444	100.0	209	4	US-09-904-615-168
3	316	71.2	146	4	US-09-489-847-161
4	316	71.2	146	4	US-09-904-615-121
5	316	71.2	146	4	US-09-904-615-169
6	231	52.0	79	4	US-09-904-615-167
7	231	52.0	80	4	US-09-904-615-120
8	70.5	15.9	294	4	US-09-424-349A-2
9	70.5	15.9	294	4	US-09-424-349A-9
10	68	15.3	296	4	US-09-655-270A-7
11	68	15.3	296	4	US-09-651-941-7
12	68	15.3	296	4	US-09-955-597-7
13	66.5	15.0	347	4	US-09-328-352-7107
14	65.5	14.8	735	4	US-09-585-858-10
15	64.5	14.5	1529	4	US-09-134-001C-3945
16	63.5	14.3	145	4	US-09-370-838-75
17	60.5	13.6	249	4	US-09-328-352-4629
18	59.5	13.4	321	4	US-09-134-000C-4439
19	58.5	13.2	420	4	US-09-489-039A-8961
20	58	13.1	158	5	PCT-US94-01149-27
21	58	13.1	206	6	5221624-30
22	58	13.1	284	4	US-09-165-827C-14
23	58	13.1	342	4	US-09-165-827C-2
24	58	13.1	907	3	US-08-990-140-4
25	58	13.1	907	4	US-09-546-238-4
26	58	13.1	940	3	US-08-810-712-7
27	58	13.1	1028	4	US-09-543-681A-7181
					Sequence 114, App
					Sequence 168, App
					Sequence 161, App
					Sequence 121, App
					Sequence 169, App
					Sequence 167, App
					Sequence 120, App
					Sequence 2, Appli
					Sequence 9, Appli
					Sequence 7, Appli
					Sequence 7, Appli
					Sequence 7107, Ap
					Sequence 10, Appl
					Sequence 3945, Ap
					Sequence 75, Appl
					Sequence 4629, Ap
					Sequence 4439, Ap
					Sequence 8961, Ap
					Sequence 27, Appl
					Patent No. 5221624
					Sequence 14, Appl
					Sequence 2, Appli
					Sequence 4, Appli
					Sequence 4, Appli
					Sequence 7, Appli
					Sequence 7181, Ap

28	57.5	13.0	381	4	US-09-328-352-4500	Sequence 4500, Ap
29	57.5	13.0	896	4	US-09-489-039A-10262	Sequence 10262, A
30	57.5	13.0	902	4	US-09-644-600-10	Sequence 10, Appl
31	57.5	13.0	902	4	US-09-654-600A-10	Sequence 10, Appl
32	57	12.8	134	4	US-09-543-681A-7826	Sequence 7826, Ap
33	57	12.8	196	4	US-09-328-352-4585	Sequence 4585, Ap
34	57	12.8	200	3	US-08-478-316-39	Sequence 39, Appl
35	57	12.8	200	4	US-09-019-793A-39	Sequence 39, Appl
36	57	12.8	201	1	US-08-157-005-7	Sequence 7, Appli
37	57	12.8	201	2	US-08-799-464A-22	Sequence 22, Appl
38	57	12.8	201	3	US-08-747-863-7	Sequence 7, Appli
39	57	12.8	201	4	US-09-565-864-7	Sequence 7, Appli
40	57	12.8	201	4	US-08-301-435-21	Sequence 21, Appl
41	57	12.8	201	5	PCT-US95-0927-22	Sequence 22, Appl
42	57	12.8	201	5	PCT-US95-10904-21	Sequence 21, Appl
43	57	12.8	1836	4	US-10-162-012-24	Sequence 24, Appl
44	56.5	12.7	73	4	US-09-252-991A-23313	Sequence 23313, A
45	56.5	12.7	404	1	US-08-203-716-2	Sequence 2, Appli
46	56.5	12.7	404	1	US-08-242-663A-2	Sequence 2, Appli
47	56.5	12.7	404	1	US-08-440-179-2	Sequence 2, Appli
48	56.5	12.7	404	2	US-08-450-130A-1	Sequence 1, Appli
49	56.5	12.7	404	2	US-08-391-916A-2	Sequence 2, Appli
50	56.5	12.7	404	2	US-08-573-890-2	Sequence 2, Appli
51	56.5	12.7	404	3	US-08-450-362A-1	Sequence 1, Appli
52	56.5	12.7	404	3	US-08-258-287B-39	Sequence 39, Appl
53	56.5	12.7	404	3	US-08-368-704C-39	Sequence 39, Appl
54	56.5	12.7	404	3	US-08-954-536-18	Sequence 18, Appl
55	56.5	12.7	404	3	US-09-039-657-2	Sequence 2, Appli
56	56.5	12.7	404	3	US-08-748-547-2	Sequence 2, Appli
57	56.5	12.7	404	3	US-08-908-436-3	Sequence 3, Appli
58	56.5	12.7	404	3	US-09-248-179-2	Sequence 2, Appli
59	56.5	12.7	404	4	US-09-069-023-30	Sequence 30, Appl
60	56.5	12.7	404	4	US-09-561-756-6	Sequence 6, Appli
61	56.5	12.7	404	4	US-09-227-721-6	Sequence 6, Appli
62	56.5	12.7	404	4	US-08-983-502-13	Sequence 13, Appl
63	56.5	12.7	404	4	US-08-724-378D-7	Sequence 7, Appli
64	56.5	12.7	404	4	US-09-827-708A-2	Sequence 2, Appli
65	56.5	12.7	404	4	US-09-516-747-13	Sequence 13, Appl
66	56.5	12.7	404	4	US-09-954-697-6	Sequence 6, Appli
67	56.5	12.7	404	4	US-09-291-289-5	Sequence 5, Appli
68	56.5	12.7	404	5	PCT-US93-05705-4	Sequence 4, Appli
69	56.5	12.7	404	5	PCT-US95-06132-2	Sequence 2, Appli
70	56.5	12.7	404	5	PCT-US95-07619-1	Sequence 1, Appli
71	56.5	12.7	404	5	PCT-US96-10521-13	Sequence 13, Appl
72	56.5	12.7	414	4	US-09-107-532A-6371	Sequence 6371, Ap
73	56.5	12.7	501	4	US-09-134-000C-4693	Sequence 4693, Ap
74	56.5	12.7	718	4	US-09-540-236-2753	Sequence 2753, Ap
75	56	12.6	114	4	US-09-489-039A-11715	Sequence 11715, A
76	56	12.6	416	3	US-09-228-246-4	Sequence 4, Appli
77	56	12.6	1824	2	US-08-680-327-3	Sequence 3, Appli
78	56	12.6	1824	2	US-09-228-246-2	Sequence 2, Appli
79	55.5	12.5	383	2	US-08-391-916A-4	Sequence 4, Appli
80	55.5	12.5	734	4	US-09-585-858-9	Sequence 9, Appli
81	55	12.4	528	4	US-08-987-691A-4	Sequence 4, Appli
82	54.5	12.3	362	1	US-08-415-751-5	Sequence 5, Appli
83	54.5	12.3	503	4	US-09-134-001C-3480	Sequence 3480, Ap
84	54.5	12.3	531	2	US-08-933-750C-9	Sequence 9, Appli
85	54.5	12.3	531	3	US-09-234-613-9	Sequence 9, Appli
86	54.5	12.3	531	4	US-09-647-143-2	Sequence 2, Appli
87	54.5	12.3	553	4	US-09-543-681A-8109	Sequence 8109, Ap
88	54.5	12.3	561	4	US-09-489-039A-11625	Sequence 11625, A
89	54	12.2	274	3	US-09-141-821-3	Sequence 3, Appli
90	54	12.2	570	4	US-09-543-681A-5889	Sequence 5889, Ap
91	54	12.2	855	2	US-09-027-337-2	Sequence 2, Appli
92	54	12.2	855	4	US-09-644-600-2	Sequence 2, Appli
93	54	12.2	855	4	US-09-654-600A-2	Sequence 2, Appli
94	54	12.2	906	2	US-08-609-230A-9	Sequence 9, Appli
95	53.5	12.0	368	4	US-09-668-097A-10	Sequence 10, Appl
96	53.5	12.0	405	4	US-09-355-912A-3	Sequence 3, Appli
97	53.5	12.0	416	3	US-09-333-208-2	Sequence 2, Appli
98	53.5	12.0	416	3	US-09-333-254-2	Sequence 2, Appli
99	53.5	12.0	416	4	US-09-183-270-2	Sequence 2, Appli
100	53.5	12.0	434	4	US-09-355-912A-4	Sequence 4, Appli

ALIGNMENTS

RESULT 1
US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.7e-49;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDSKIWPRVEIF 83
Db 92 DSSLSPANYSDSKIWPRVEIF 114

RESULT 2
US-09-904-615-168
; Sequence 168, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-168

Query Match 100.0%; Score 444; DB 4; Length 209;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 59 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 118

QY 61 DSSLSPANYSDSKIWPRVEIF 83
Db 119 DSSLSPANYSDSKIWPRVEIF 141
RESULT 3
US-09-489-847-161
; Sequence 161, Application US/09489847
; Patent No. 6476195
; GENERAL INFORMATION:
; APPLICANT: Rosen et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P1
; CURRENT APPLICATION NUMBER: US/09/489,847
; CURRENT FILING DATE: 2000-01-24
; EARLIER APPLICATION NUMBER: PCT/US99/17130
; EARLIER FILING DATE: 1999-07-29
; EARLIER APPLICATION NUMBER: 60/094,657
; EARLIER FILING DATE: 1998-07-30
; EARLIER APPLICATION NUMBER: 60/095,486
; EARLIER FILING DATE: 1998-08-05
; EARLIER APPLICATION NUMBER: 60/096,319
; EARLIER FILING DATE: 1998-08-12
; EARLIER APPLICATION NUMBER: 60/095,454
; EARLIER FILING DATE: 1998-08-06
; EARLIER APPLICATION NUMBER: 60/095,455
; EARLIER FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 161
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-489-847-161

Query Match 71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;
QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLTAS 91
QY 61 D-SLLSPANYSD-DSKIWRP 79
Db 92 EPLXSYPCCKLLQMLXKIWRP 112

```
RESULT 4
US-09-904-615-121
; Sequence 121, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 121
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-121

Query Match      71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGTAS 91
   |||||

QY 61 D-SLLSYYPANYSYD-DSKIWRP 79
   |||||
Db 92 RFPLXSYPCCKLLQMIKIXWP 112
   |||||

RESULT 5
US-09-904-615-169
; Sequence 169, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 169
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-121

Query Match      71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGTAS 91
   |||||

QY 61 D-SLLSYYPANYSYD-DSKIWRP 79
   |||||
Db 92 RFPLXSYPCCKLLQMIKIXWP 112
   |||||

RESULT 6
US-09-904-615-167
; Sequence 167, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 167
; LENGTH: 79
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-904-615-167

Query Match      52.0%; Score 231; DB 4; Length 79;
Best Local Similarity 100.0%; Pred. No. 2e-22;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKE 44
   |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKE 75
   |||||

RESULT 7
```

```
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 169
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-169

Query Match      71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGTAS 91
   |||||

QY 61 D-SLLSYYPANYSYD-DSKIWRP 79
   |||||
Db 92 RFPLXSYPCCKLLQMIKIXWP 112
   |||||

RESULT 6
US-09-904-615-167
; Sequence 167, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 167
; LENGTH: 79
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-904-615-167

Query Match      52.0%; Score 231; DB 4; Length 79;
Best Local Similarity 100.0%; Pred. No. 2e-22;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKE 44
   |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKE 75
   |||||

RESULT 7
```

TITLE OF INVENTION: Human Hox C10 and Polynucleotide Encoding Same
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:

ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/165,827C
FILING DATE: 02-Oct-1998
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: <Unknown>
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:

NAME: MULLINS, J.G.
REGISTRATION NUMBER: 33,073
REFERENCE/DOCKET NUMBER: 640100-164 (97-011)
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 284 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS: <Unknown>
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-165-827C-14

Query Match 13.1%; Score 58; DB 4; Length 284;
Best Local Similarity 29.3%; Pred. No. 25;
Matches 24; Conservative 11; Mismatches 45; Indels 2; Gaps 2;

QY 1 LPASSLSLVQVTSYNFGRTEFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 133 LPESCLGEHEVPVPSYRASPSYSALEKTPHCSGANDFEAPF-EQRASLNPRAEHLESPQ 191
QY 61 -DSLSPYANYSDSKIRPVE 81
Db 192 LGGKVSFPETPKSDSQTPAPMK 213

RESULT 23
US-09-165-827C-2
Sequence 2, Application US/09165827C
Patent No. 6358702
GENERAL INFORMATION:
APPLICANT: Timothy Connolly and Jian Zhang
TITLE OF INVENTION: Human Hox C10 and Polynucleotide Encoding Same
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:

ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/165,827C
FILING DATE: 02-Oct-1998
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: <Unknown>
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:

NAME: MULLINS, J.G.
REGISTRATION NUMBER: 33,073
REFERENCE/DOCKET NUMBER: 640100-164 (97-011)
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 342 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS: <Unknown>
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-165-827C-2

Query Match 13.1%; Score 58; DB 4; Length 342;
Best Local Similarity 29.3%; Pred. No. 31;
Matches 24; Conservative 11; Mismatches 45; Indels 2; Gaps 2;

QY 1 LPASSLSLVQVTSYNFGRTEFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 133 LPESCLGEHEVPVPSYRASPSYSALEKTPHCSGANDFEAPF-EQRASLNPRAEHLESPQ 191
QY 61 -DSLSPYANYSDSKIRPVE 81
Db 192 LGGKVSFPETPKSDSQTPAPMK 213

RESULT 24
US-08-990-140-4
Sequence 4, Application US/08990140A
Patent No. 6093795

GENERAL INFORMATION:
APPLICANT: Olsen, Henrik S.
APPLICANT: Ruben, Steven M.
APPLICANT: Sonenberg, Nahum
APPLICANT: Methot, Nathalie
APPLICANT: Rom, Eran
TITLE OF INVENTION: Human Prt1-like Subunit Protein (hPrt1) and Human
TITLE OF INVENTION: eIF4G-like Protein (p97) Genes
FILE REFERENCE: 1488.0700001
CURRENT APPLICATION NUMBER: US/08/990,140A
CURRENT FILING DATE: 1997-12-12
EARLIER APPLICATION NUMBER: US 60/033,151
EARLIER FILING DATE: 1996-12-13
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 4

LENGTH: 907
TYPE: PRT
ORGANISM: Homo sapiens
US-08-990-140-4

Query Match 13.1%; Score 58; DB 3; Length 907;
Best Local Similarity 34.2%; Pred. No. 1.1e+02;
Matches 25; Conservative 10; Mismatches 30; Indels 8; Gaps 3;

QY 3 ASSLSLVQPQ--VRTSYNFGRTFLG-LDKC-----NACIGTSICKKFFKEEIRSDNWLAS 54
Db 600 ASSLSLLKQEGIATSDNFMQAFNLVDQCPKLEVDIPLVKSYLAQFAARAIISLVSI 659
QY 55 HLGPPDLSLSYP 67
Db 660 ELAQPLESGTHFP 672

RESULT 25
US-09-546-238-4
; Sequence 4, Application US/09546238
; Patent No. 6316225
; GENERAL INFORMATION:
; APPLICANT: Olsen, Henrik S.
; APPLICANT: Ruben, Steven M.
; APPLICANT: Sonenberg, Nahum
; APPLICANT: Methot, Nathalie
; APPLICANT: Rom, Eran
; TITLE OF INVENTION: Human Prt1-like Subunit Protein (Prt1) Polynucleotides
; FILE OF INVENTION: (as amended)
; FILE REFERENCE: 1488.0700002
; CURRENT APPLICATION NUMBER: US/09/546,238
; CURRENT FILING DATE: 2000-04-10
; PRIOR APPLICATION NUMBER: US 60/033,151
; PRIOR FILING DATE: 1996-12-13
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 907
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-546-238-4
Query Match 13.1%; Score 58; DB 4; Length 907;
Best Local Similarity 34.2%; Pred. No. 1.1e+02;
Matches 25; Conservative 10; Mismatches 30; Indels 8; Gaps 3;
QY 3 ASSLSLVPQ--VRTSYNFGRTFLG-LDKC-----NACIGTSICKKFFKEEIRSDNWLAS 54
Db 600 ASSLSLLKQEGIAISDNFMQAFNLVLDQCPKLEVDIPLVKSYLEAQAFAARAIISLVSIS 659
QY 55 HGLPPDLSL SYP 67
Db 660 ELAQPLESNGTHFP 672
RESULT 26
US-08-810-712-7
; Sequence 7, Application US/08810712G
; Patent No. 6160106
; GENERAL INFORMATION:
; APPLICANT: Yeda Research and Development Co. LTD
; TITLE OF INVENTION: Tumor Suppressor Genes, Proteins Encoded Thereby and
; TITLE OF INVENTION: Use of said Genes and Proteins
; FILE REFERENCE: sequencelist
; CURRENT APPLICATION NUMBER: US/08/810,712G
; CURRENT FILING DATE: 1997-03-03
; EARLIER APPLICATION NUMBER: PCT/US94/11598
; EARLIER FILING DATE: 1994-10-12
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 940
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-810-712-7
Query Match 13.1%; Score 58; DB 3; Length 940;
Best Local Similarity 34.2%; Pred. No. 1.2e+02;
Matches 25; Conservative 10; Mismatches 30; Indels 8; Gaps 3;
QY 3 ASSLSLVPQ--VRTSYNFGRTFLG-LDKC-----NACIGTSICKKFFKEEIRSDNWLAS 54
Db 633 ASSLSLLKQEGIAISDNFMQAFNLVLDQCPKLEVDIPLVKSYLEAQAFAARAIISLVSIS 692
QY 55 HGLPPDLSL SYP 67
Db 693 ELAQPLESNGTHFP 705

RESULT 27
US-09-543-681A-7181
; Sequence 7181, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABI
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 7181
; LENGTH: 1028
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-7181
Query Match 13.1%; Score 58; DB 4; Length 1028;
Best Local Similarity 27.6%; Pred. No. 1.3e+02;
Matches 24; Conservative 13; Mismatches 34; Indels 16; Gaps 4;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGDKCNACIGT-----SICKKFFKEEIRSDNWLAS 54
Db 34 LPAQALPSL-----SHEPFGDLYLFEDEXENTLSTNDHQLSLSKHAKDGVQSLKWQYQ 88
QY 55 HGLPPDSL-LSYPANYSDDSKIWRPV 80
Db 89 ----PQSTLTNNVNYQDDKNTATPL 111
RESULT 28
US-09-328-352-4500
; Sequence 4500, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4500
; LENGTH: 381
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4500
Query Match 13.0%; Score 57.5; DB 4; Length 381;
Best Local Similarity 27.1%; Pred. No. 42;
Matches 16; Conservative 12; Mismatches 24; Indels 7; Gaps 2;
QY 3 ASSLSLVPQVRTSYNFGRTFLGDKCNACIGTSICKKFFKE-----EIRSDNWLASHL 56
Db 227 AATARAWLPVELHYQFGKT--GVNKRFPYIGAGVMYAYFNDLKMNSGIEADLIQAGHM 283
RESULT 29
US-09-489-039A-10262
; Sequence 10262, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747

```
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 10262
; LENGTH: 896
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-10262

Query Match      13.0%; Score 57.5; DB 4; Length 896;
Best Local Similarity 25.6%; Pred. No. 1.3e+02;
Matches 23; Conservative 9; Mismatches 31; Indels 27; Gaps 4;

QY 1 LPASSLSSL-----VPQVRTSYNFG--RTFLGLDKCNACIGTSL-----CKKFF- 42
Db 290 LPADVAGFYREFIAAPRAITLYTMGINQSASGSDKCNAIINVLASGKYGRRGCGPFSL 349

QY 43 -----KEEIRSDNWLASHLGLPPDSL 63
Db 350 TGQPNAMGREGVGGIATMLAAMDFVDDL 379

RESULT 30
US-09-644-600-10
; Sequence 10, Application US/09644600
; Patent No. 6451500
; GENERAL INFORMATION:
; APPLICANT: O'Brien, Timothy J.
; APPLICANT: Tanimoto, Hirotochi
; TITLE OF INVENTION: TADG-15: An Extracellular Serine Protease
; TITLE OF INVENTION: Overexpressed in Carcinomas
; FILE REFERENCE: D6064CIP/D
; CURRENT APPLICATION NUMBER: US/09/644,600
; CURRENT FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 09/421,213
; PRIOR FILING DATE: 1999-10-20
; PRIOR APPLICATION NUMBER: 09/027,337
; PRIOR FILING DATE: 1998-02-20
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 10
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
; FEATURE:
; OTHER INFORMATION: Epithin
US-09-644-600-10

Query Match      13.0%; Score 57.5; DB 4; Length 902;
Best Local Similarity 27.9%; Pred. No. 1.3e+02;
Matches 17; Conservative 8; Mismatches 21; Indels 15; Gaps 3;

QY 15 TSYNFGRTFLGLDKCNACIGTSICK--KFFKEIRSDNWLASHLGLPPDSLSPANYSD 72
Db 436 TDTGLAEYLSYDSNDPCPGMFCKTGRCTRKELRCDGWADC-----PD-----YSD 482

QY 73 D 73
Db 483 E 483
```

Search completed: June 14, 2004, 08:02:34
Job time : 11.3358 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 08:00:36 ; Search time 24.7434 Seconds
(without alignments)
945.031 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114
Perfect score: 444
Sequence: 1 LPASSLSLVPQVRTSYNFG.....LSYPANYSDBSKWRPVEIF 83

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1158786 seqs, 281726120 residues

Total number of hits satisfying chosen parameters: 1158786

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match: 0%
Maximum Match: 100%
Listing first 100 summaries

Database : Published Applications AA.*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	444	100.0	182	9	US-09-739-254-114 Sequence 114, App
2	444	100.0	182	9	US-09-904-615-114 Sequence 114, App
3	444	100.0	182	9	US-09-965-528-10 Sequence 10, Appl
4	444	100.0	182	12	US-10-147-493-172 Sequence 172, App
5	444	100.0	182	12	US-10-145-127-172 Sequence 172, App
6	444	100.0	182	12	US-10-160-503-172 Sequence 172, App
7	444	100.0	182	12	US-10-211-462-217 Sequence 217, App
8	444	100.0	182	12	US-10-143-118-172 Sequence 172, App
9	444	100.0	182	12	US-10-144-993-172 Sequence 172, App
10	444	100.0	182	12	US-10-158-787-172 Sequence 172, App
11	444	100.0	182	12	US-09-969-984-10 Sequence 10, Appl
12	444	100.0	182	12	US-10-140-024-172 Sequence 172, App
13	444	100.0	182	12	US-10-140-808-172 Sequence 172, App
14	444	100.0	182	12	US-10-152-405-172 Sequence 172, App
15	444	100.0	182	12	US-10-127-852A-172 Sequence 172, App

16	444	100.0	182	12	US-10-127-900A-172 Sequence 172, App
17	444	100.0	182	12	US-10-128-685A-172 Sequence 172, App
18	444	100.0	182	12	US-10-131-820A-172 Sequence 172, App
19	444	100.0	182	12	US-10-142-886-172 Sequence 172, App
20	444	100.0	182	12	US-10-146-728-172 Sequence 172, App
21	444	100.0	182	12	US-10-146-786-172 Sequence 172, App
22	444	100.0	182	12	US-10-147-499-172 Sequence 172, App
23	444	100.0	182	12	US-10-157-798-172 Sequence 172, App
24	444	100.0	182	14	US-10-028-072-172 Sequence 172, App
25	444	100.0	182	14	US-10-121-049-172 Sequence 172, App
26	444	100.0	182	14	US-10-123-904-172 Sequence 172, App
27	444	100.0	182	14	US-10-140-470-172 Sequence 172, App
28	444	100.0	182	14	US-10-175-746-172 Sequence 172, App
29	444	100.0	182	14	US-10-176-918-172 Sequence 172, App
30	444	100.0	182	14	US-10-176-921-172 Sequence 172, App
31	444	100.0	182	14	US-10-137-865-172 Sequence 172, App
32	444	100.0	182	14	US-10-140-474-172 Sequence 172, App
33	444	100.0	182	14	US-10-142-431-172 Sequence 172, App
34	444	100.0	182	14	US-10-143-114-172 Sequence 172, App
35	444	100.0	182	14	US-10-140-002-172 Sequence 172, App
36	444	100.0	182	14	US-10-142-419-172 Sequence 172, App
37	444	100.0	182	14	US-10-123-262-172 Sequence 172, App
38	444	100.0	182	14	US-10-142-423-172 Sequence 172, App
39	444	100.0	182	14	US-10-121-050-172 Sequence 172, App
40	444	100.0	182	14	US-10-141-755-172 Sequence 172, App
41	444	100.0	182	14	US-10-143-032-172 Sequence 172, App
42	444	100.0	182	14	US-10-123-108-172 Sequence 172, App
43	444	100.0	182	14	US-10-123-236-172 Sequence 172, App
44	444	100.0	182	14	US-10-123-261-172 Sequence 172, App
45	444	100.0	182	14	US-10-140-321-172 Sequence 172, App
46	444	100.0	182	14	US-10-140-928-172 Sequence 172, App
47	444	100.0	182	14	US-10-121-045-172 Sequence 172, App
48	444	100.0	182	14	US-10-123-292-172 Sequence 172, App
49	444	100.0	182	14	US-10-123-903-172 Sequence 172, App
50	444	100.0	182	14	US-10-124-819-172 Sequence 172, App
51	444	100.0	182	14	US-10-124-822-172 Sequence 172, App
52	444	100.0	182	14	US-10-140-925-172 Sequence 172, App
53	444	100.0	182	14	US-10-160-498-172 Sequence 172, App
54	444	100.0	182	14	US-10-124-824-172 Sequence 172, App
55	444	100.0	182	14	US-10-127-825A-172 Sequence 172, App
56	444	100.0	182	14	US-10-127-829A-172 Sequence 172, App
57	444	100.0	182	14	US-10-127-835A-172 Sequence 172, App
58	444	100.0	182	14	US-10-127-839A-172 Sequence 172, App
59	444	100.0	182	14	US-10-127-901A-172 Sequence 172, App
60	444	100.0	182	14	US-10-128-693A-172 Sequence 172, App
61	444	100.0	182	14	US-10-131-813A-172 Sequence 172, App
62	444	100.0	182	14	US-10-131-818A-172 Sequence 172, App
63	444	100.0	182	14	US-10-131-823A-172 Sequence 172, App
64	444	100.0	182	14	US-10-131-824A-172 Sequence 172, App
65	444	100.0	182	14	US-10-131-830A-172 Sequence 172, App
66	444	100.0	182	14	US-10-131-837A-172 Sequence 172, App
67	444	100.0	182	14	US-10-137-872A-172 Sequence 172, App
68	444	100.0	182	14	US-10-147-500-172 Sequence 172, App
69	444	100.0	182	14	US-10-147-502-172 Sequence 172, App
70	444	100.0	182	14	US-10-147-515-172 Sequence 172, App
71	444	100.0	182	14	US-10-147-517-172 Sequence 172, App
72	444	100.0	182	14	US-10-147-526-172 Sequence 172, App
73	444	100.0	182	14	US-10-147-527-172 Sequence 172, App
74	444	100.0	182	14	US-10-121-041-172 Sequence 172, App
75	444	100.0	182	14	US-10-121-043-172 Sequence 172, App
76	444	100.0	182	14	US-10-121-047-172 Sequence 172, App
77	444	100.0	182	14	US-10-123-215-172 Sequence 172, App
78	444	100.0	182	14	US-10-123-902-172 Sequence 172, App
79	444	100.0	182	14	US-10-123-908-172 Sequence 172, App
80	444	100.0	182	14	US-10-123-909-172 Sequence 172, App
81	444	100.0	182	14	US-10-123-910-172 Sequence 172, App
82	444	100.0	182	14	US-10-124-813-172 Sequence 172, App
83	444	100.0	182	14	US-10-124-817-172 Sequence 172, App
84	444	100.0	182	14	US-10-125-922-172 Sequence 172, App
85	444	100.0	182	14	US-10-125-924-172 Sequence 172, App
86	444	100.0	182	14	US-10-140-860-172 Sequence 172, App
87	444	100.0	182	14	US-10-142-417-172 Sequence 172, App
88	444	100.0	182	14	US-10-147-519-172 Sequence 172, App


```
89 444 100.0 182 14 US-10-157-782-172 Sequence 172, App
90 444 100.0 182 14 US-10-152-395-172 Sequence 172, App
91 444 100.0 182 14 US-10-125-926A-172 Sequence 172, App
92 444 100.0 182 14 US-10-125-930A-172 Sequence 172, App
93 444 100.0 182 14 US-10-127-831A-172 Sequence 172, App
94 444 100.0 182 14 US-10-127-837A-172 Sequence 172, App
95 444 100.0 182 14 US-10-127-838B-172 Sequence 172, App
96 444 100.0 182 14 US-10-127-842A-172 Sequence 172, App
97 444 100.0 182 14 US-10-127-843A-172 Sequence 172, App
98 444 100.0 182 14 US-10-127-845A-172 Sequence 172, App
99 444 100.0 182 14 US-10-127-846A-172 Sequence 172, App
100 444 100.0 182 14 US-10-127-848A-172 Sequence 172, App
```

ALIGNMENTS

```
RESULT 1
US-09-739-254-114
; Sequence 114, Application US/09739254
; Patent No. US20010021700A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/739,254
; CURRENT FILING DATE: 2000-12-19
; EARLIER APPLICATION NUMBER: 09/511,554
; EARLIER FILING DATE: 2000-02-23
; EARLIER APPLICATION NUMBER: PCT/US99/19330
; EARLIER FILING DATE: 1999-08-24
; EARLIER APPLICATION NUMBER: 60/097,917
; EARLIER FILING DATE: 1998-08-25
; EARLIER APPLICATION NUMBER: 60/098,634
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-739-254-114

Query Match 100.0%; Score 444; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSSLSPANYSDSKIWRPVEIF 83
Db 92 DSSLSPANYSDSKIWRPVEIF 114

RESULT 2
US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. US20020026040A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
```

```
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 444; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSSLSPANYSDSKIWRPVEIF 83
Db 92 DSSLSPANYSDSKIWRPVEIF 114

RESULT 3
US-09-965-528-10
; Sequence 10, Application US/09965528
; Publication No. US20020187523A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BURFORD, Neil
; APPLICANT: HANDMAN, Olga
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: AZIMZAI, Valda
; APPLICANT: LU, Dyung Aina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
; FILE REFERENCE: PF-0701 USA
; CURRENT APPLICATION NUMBER: US/09/965,528
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/134,949
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/144,270
; PRIOR FILING DATE: 1999-07-15
; PRIOR APPLICATION NUMBER: 60/146,700
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 60/157,508
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PERL Program
; SEQ ID NO 10
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020187523A1 5090841CD1
US-09-965-528-10

Query Match 100.0%; Score 444; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSSLSPANYSDSKIWRPVEIF 83
Db 92 DSSLSPANYSDSKIWRPVEIF 114

RESULT 4
US-10-147-493-172
```

```
; Sequence 172, Application US/10147493
; Publication No. US20040029217A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C345
; CURRENT APPLICATION NUMBER: US/10/147,493
; CURRENT FILING DATE: 2002-05-17
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-147-493-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db      32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91

QY      61 DSSLSPANYSDSDSKIWRPVEIF 83
Db      92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 5
US-10-145-127-172
; Sequence 172, Application US/10145127
; Publication No. US20040033558A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C252
; CURRENT APPLICATION NUMBER: US/10/145,127
; CURRENT FILING DATE: 2002-05-13
```

```
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-145-127-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db      32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91

QY      61 DSSLSPANYSDSDSKIWRPVEIF 83
Db      92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 6
US-10-160-503-172
; Sequence 172, Application US/10160503
; Publication No. US20040033559A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C446
; CURRENT APPLICATION NUMBER: US/10/160,503
; CURRENT FILING DATE: 2002-05-30
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-160-503-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db      32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91

QY      61 DSSLSPANYSDSDSKIWRPVEIF 83
Db      92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 7
US-10-211-462-217
; Sequence 217, Application US/10211462
; Publication No. US20040033495A1
; GENERAL INFORMATION:
```

APPLICANT: Murray, Richard
APPLICANT: Glynn, Richard
APPLICANT: Watson, Susan R.
APPLICANT: Aziz, Natasha
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis, Compositions and
TITLE OF INVENTION: Methods of Screening for Angiogenesis Modulators
FILE REFERENCE: 018501-006200US
CURRENT APPLICATION NUMBER: US/10/211,462
CURRENT FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US 09/784,356
PRIOR FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: US 09/791,390
PRIOR FILING DATE: 2001-02-22
PRIOR APPLICATION NUMBER: US 60/310,025
PRIOR FILING DATE: 2001-08-03
PRIOR APPLICATION NUMBER: US 60/334,244
PRIOR FILING DATE: 2001-11-29
NUMBER OF SEQ ID NOS: 230
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 217
LENGTH: 182
TYPE: PRT
ORGANISM: Homo sapiens
US-10-211-462-217

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DLSLSPANYSDSDSKIWRPVEIF 83
Db 92 DLSLSPANYSDSDSKIWRPVEIF 114

RESULT 8
US-10-143-118-172
Sequence 172, Application US/10143118
Publication No. US20040038335A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C228
CURRENT APPLICATION NUMBER: US/10/143,118
CURRENT FILING DATE: 2002-05-09
Prior Application removed - See Palm or File Wrapper
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-143-118-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DLSLSPANYSDSDSKIWRPVEIF 83
Db 92 DLSLSPANYSDSDSKIWRPVEIF 114

RESULT 9
US-10-144-993-172
Sequence 172, Application US/10144993
Publication No. US20040038336A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C261
CURRENT APPLICATION NUMBER: US/10/144,993
CURRENT FILING DATE: 2002-05-13
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-144-993-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DLSLSPANYSDSDSKIWRPVEIF 83
Db 92 DLSLSPANYSDSDSKIWRPVEIF 114

RESULT 10
US-10-158-787-172
Sequence 172, Application US/10158787
Publication No. US20040039164A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C449
CURRENT APPLICATION NUMBER: US/10/158,787
CURRENT FILING DATE: 2003-04-03
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-158-787-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDDSKIWRPVEIF 83
Db 92 DSSLSPANYSDDSKIWRPVEIF 114

RESULT 11
US-09-969-984-10
Sequence 10, Application US/09969984
Publication No. US20040048244A1
GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.
APPLICANT: TANG, Y. Tom
APPLICANT: YUE, Henry
APPLICANT: LAL, Preeti
APPLICANT: BURFORD, Neil
APPLICANT: BANDMAN, Olga
APPLICANT: BAUGHN, Mariah R.
APPLICANT: AZIMZAI, Yalda
APPLICANT: LU, Dyung Aina M.
APPLICANT: PATTERSON, Chandra
TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES

FILE REFERENCE: PF-0701-1 USA
CURRENT APPLICATION NUMBER: US/09/969,984
CURRENT FILING DATE: 2001-10-02
PRIOR APPLICATION NUMBER: 60/134,949; 60/144,270; 60/146,700; 60/157,508
PRIOR FILING DATE: 1999-05-19; 1999-07-15; 1999-07-30; 1999-10-04
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PERL Program
SEQ ID NO 10
LENGTH: 182
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. US20040048244A1 5090841CD1
US-09-969-984-10
Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDDSKIWRPVEIF 83
Db 92 DSSLSPANYSDDSKIWRPVEIF 114

RESULT 12
US-10-140-024-172
Sequence 172, Application US/10140024
Publication No. US20040058424A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C69
CURRENT APPLICATION NUMBER: US/10/140,024
CURRENT FILING DATE: 2002-05-06
Prior Application removed - See Palm or File Wrapper
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-140-024-172
Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDDSKIWRPVEIF 83

US-10-140-024-172
Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDDSKIWRPVEIF 83

Db 92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 13

US-10-140-808-172

Sequence 172, Application US/10140808

Publication No. US20030017563A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: DeForge, Laura

APPLICANT: Desnoyers, Luc

APPLICANT: Filvaroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K

APPLICANT: Wood, William

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

FILE REFERENCE: P3330R1C182

CURRENT APPLICATION NUMBER: US/10/140,808

CURRENT FILING DATE: 2002-05-07

Prior Application removed - See File Wrapper or Palm

NUMBER OF SEQ ID NOS: 550

SEQ ID NO 172

LENGTH: 182

TYPE: PRT

ORGANISM: Homo Sapien

US-10-140-808-172

Query Match

Best Local Similarity 100.0%; Score 444; DB 12; Length 182;

Mismatches 0; Indels 0; Gaps 0;

Matches 83; Conservative 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60

Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSSLSPANYSDSDSKIWRPVEIF 83

Db 92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 14

US-10-152-405-172

Sequence 172, Application US/10152405

Publication No. US20030211571A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: DeForge, Laura

APPLICANT: Desnoyers, Luc

APPLICANT: Filvaroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K

APPLICANT: Wood, William

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

FILE REFERENCE: P3330R1C383

CURRENT APPLICATION NUMBER: US/10/152,405

CURRENT FILING DATE: 2002-05-20

Prior Application removed - See File Wrapper or Palm

NUMBER OF SEQ ID NOS: 550

SEQ ID NO 172

LENGTH: 182

TYPE: PRT

ORGANISM: Homo Sapien

US-10-152-405-172

Query Match

Best Local Similarity 100.0%; Score 444; DB 12; Length 182;

Mismatches 0; Indels 0; Gaps 0;

Matches 83; Conservative 0; Mismatches 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60

Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSSLSPANYSDSDSKIWRPVEIF 83

Db 92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 15

US-10-127-852A-172

Sequence 172, Application US/10127852A

Publication No. US20030203428A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: DeForge, Laura

APPLICANT: Desnoyers, Luc

APPLICANT: Filvaroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K

APPLICANT: Wood, William

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

FILE REFERENCE: P3330R1C88

CURRENT APPLICATION NUMBER: US/10/127,852A

CURRENT FILING DATE: 2002-10-15

PRIOR APPLICATION NUMBER: 60/049911

PRIOR FILING DATE: 1997-06-18

PRIOR APPLICATION NUMBER: 60/056974

PRIOR FILING DATE: 1997-08-26

PRIOR APPLICATION NUMBER: 60/059113

PRIOR FILING DATE: 1997-09-17

PRIOR APPLICATION NUMBER: 60/059115

PRIOR FILING DATE: 1997-09-17

PRIOR APPLICATION NUMBER: 60/059117

PRIOR FILING DATE: 1997-09-17

PRIOR APPLICATION NUMBER: 60/059122

PRIOR FILING DATE: 1997-09-17

PRIOR APPLICATION NUMBER: 60/059184

PRIOR FILING DATE: 1997-09-17

PRIOR APPLICATION NUMBER: 60/059263

PRIOR FILING DATE: 1997-09-18

PRIOR APPLICATION NUMBER: 60/059352

PRIOR FILING DATE: 1997-09-19

PRIOR APPLICATION NUMBER: 60/059588

;; PRIOR FILING DATE: 1997-09-19
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 550

;; SEQ ID NO 172
;; LENGTH: 182
;; TYPE: PRT
;; ORGANISM: Homo Sapien
US-10-127-852A-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 16

US-10-127-900A-172
;; Sequence 172, Application US/10127900A
;; Publication No. US20030203429A1
;; GENERAL INFORMATION:
;; APPLICANT: Baker, Kevin P.
;; APPLICANT: Beresini, Maureen
;; APPLICANT: DeForge, Laura
;; APPLICANT: Desnoyers, Luc
;; APPLICANT: Filvaroff, Ellen
;; APPLICANT: Gao, Wei-Qiang
;; APPLICANT: Gerritsen, Mary E.
;; APPLICANT: Goddard, Audrey
;; APPLICANT: Godowski, Paul J.
;; APPLICANT: Gurney, Austin L.
;; APPLICANT: Sherwood, Steven
;; APPLICANT: Smith, Victoria
;; APPLICANT: Stewart, Timothy A.
;; APPLICANT: Tumas, Daniel
;; APPLICANT: Watanabe, Colin K
;; APPLICANT: Wood, William
;; APPLICANT: Zhang, Zemin
;; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;; TITLE OF INVENTION: ACIDS ENCODING THE SAME
;; FILE REFERENCE: P3330R1C81
;; CURRENT APPLICATION NUMBER: US/10/127,900A
;; CURRENT FILING DATE: 2002-10-15
;; PRIOR APPLICATION NUMBER: 60/049911
;; PRIOR FILING DATE: 1997-06-18
;; PRIOR APPLICATION NUMBER: 60/056974
;; PRIOR FILING DATE: 1997-08-26
;; PRIOR APPLICATION NUMBER: 60/059113
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059115
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059117
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059122
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059184
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059263
;; PRIOR FILING DATE: 1997-09-18
;; PRIOR APPLICATION NUMBER: 60/059352
;; PRIOR FILING DATE: 1997-09-19
;; PRIOR APPLICATION NUMBER: 60/059588
;; PRIOR FILING DATE: 1997-09-19
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 550
;; SEQ ID NO 172
;; LENGTH: 182

;; TYPE: PRT
;; ORGANISM: Homo Sapien
US-10-127-900A-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 17

US-10-128-685A-172
;; Sequence 172, Application US/10128685A
;; Publication No. US20030203430A1
;; GENERAL INFORMATION:
;; APPLICANT: Baker, Kevin P.
;; APPLICANT: Beresini, Maureen
;; APPLICANT: DeForge, Laura
;; APPLICANT: Desnoyers, Luc
;; APPLICANT: Filvaroff, Ellen
;; APPLICANT: Gao, Wei-Qiang
;; APPLICANT: Gerritsen, Mary E.
;; APPLICANT: Goddard, Audrey
;; APPLICANT: Godowski, Paul J.
;; APPLICANT: Gurney, Austin L.
;; APPLICANT: Sherwood, Steven
;; APPLICANT: Smith, Victoria
;; APPLICANT: Stewart, Timothy A.
;; APPLICANT: Tumas, Daniel
;; APPLICANT: Watanabe, Colin K
;; APPLICANT: Wood, William
;; APPLICANT: Zhang, Zemin
;; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;; TITLE OF INVENTION: ACIDS ENCODING THE SAME
;; FILE REFERENCE: P3330R1C116
;; CURRENT APPLICATION NUMBER: US/10/128,685A
;; CURRENT FILING DATE: 2002-04-23
;; PRIOR APPLICATION NUMBER: 60/049911
;; PRIOR FILING DATE: 1997-06-18
;; PRIOR APPLICATION NUMBER: 60/056974
;; PRIOR FILING DATE: 1997-08-26
;; PRIOR APPLICATION NUMBER: 60/059113
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059115
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059117
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059122
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059184
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059263
;; PRIOR FILING DATE: 1997-09-18
;; PRIOR APPLICATION NUMBER: 60/059352
;; PRIOR FILING DATE: 1997-09-19
;; PRIOR APPLICATION NUMBER: 60/059588
;; PRIOR FILING DATE: 1997-09-19
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 550
;; SEQ ID NO 172
;; LENGTH: 182
;; TYPE: PRT
;; ORGANISM: Homo Sapien
US-10-128-685A-172

Query Match

100.0%; Score 444; DB 12; Length 182;

Best Local Similarity 100.0%; Pred. No. 4.2e-47; Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSSLSPANYSDSDSKIWRPVEIF 83
Db 92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 18
US-10-131-820A-172
; Sequence 172, Application US/10131820A
; Publication No. US20030203431A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSVEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C144
; CURRENT APPLICATION NUMBER: US/10/131,820A
; CURRENT FILING DATE: 2002-10-17
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-131-820A-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60

Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDSDSKIWRPVEIF 83
Db 92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 19
US-10-142-886-172
; Sequence 172, Application US/10142886
; Publication No. US20030203432A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C236
; CURRENT APPLICATION NUMBER: US/10/142,886
; CURRENT FILING DATE: 2002-05-10
; Prior Applcoication removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-886-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDSDSKIWRPVEIF 83
Db 92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 20
US-10-146-728-172
; Sequence 172, Application US/10146728
; Publication No. US20030203437A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.

```

; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C321
; CURRENT APPLICATION NUMBER: US/10/146,728
; CURRENT FILING DATE: 2002-05-15
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-146-728-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 21
US-10-146-786-172
; Sequence 172, Application US/10146786
; Publication No. US20030203438A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C313
; CURRENT APPLICATION NUMBER: US/10/146,786
; CURRENT FILING DATE: 2002-05-15
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-146-786-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114
```

```

QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 22
US-10-147-499-172
; Sequence 172, Application US/10147499
; Publication No. US20030203439A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C348
; CURRENT APPLICATION NUMBER: US/10/147,499
; CURRENT FILING DATE: 2002-05-17
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-147-499-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 23
US-10-157-798-172
; Sequence 172, Application US/10157798
; Publication No. US20030203440A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
```

```

; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C443
; CURRENT APPLICATION NUMBER: US/10/157,798
; CURRENT FILING DATE: 2002-05-29
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-157-798-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKKEIRSDNWLASHLGLEPP 60
Db      32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKKEIRSDNWLASHLGLEPP 91

QY      61 DSSLSPANYSDSDSKIWRPVEIF 83
Db      92 DSSLSPANYSDSDSKIWRPVEIF 114

RESULT 24
US-10-028-072-172
; Sequence 172, Application US/10028072
; Publication No. US20030004311A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang
; TITLE OF INVENTION:
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/028,072
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588

```


;
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079663
; PRIOR FILING DATE: 1998-02-27
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081695
; PRIOR FILING DATE: 1998-04-14
; PRIOR APPLICATION NUMBER: 60/081817
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081818
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/082999
; PRIOR FILING DATE: 1998-04-24
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/083545
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084627
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084637
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/085149
; PRIOR FILING DATE: 1998-05-12
; PRIOR APPLICATION NUMBER: 60/085323
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085338
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085339
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/086414
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/086430
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087106
; PRIOR FILING DATE: 1998-05-28
; PRIOR APPLICATION NUMBER: 60/088026
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088730
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088741
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088810
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088858
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/089532
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089599
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090445

;
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090538
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090863
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/091360
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091519
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07

Query Match 100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

Qy 61 DSLLSYYPANYSDDSKIWRPVEIF 83
Db 92 DSLLSYYPANYSDDSKIWRPVEIF 114

RESULT 25
US-10-121-049-172
; Sequence 172, Application US/10121049
; Publication No. US20030022239A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C17
; CURRENT APPLICATION NUMBER: US/10/121,049
; CURRENT FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-121-049-172

Query Match 100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

Qy 61 DSLLSYYPANYSDDSKIWRPVEIF 83
Db 92 DSLLSYYPANYSDDSKIWRPVEIF 114

; Sequence 172, Application US/10176918
; Publication No. US20030027275A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C382
; CURRENT APPLICATION NUMBER: US/10/176,918
; CURRENT FILING DATE: 2002-06-20
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-918-172

Query Match 100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

QY 61 DILLSYPANYSDDSKIWRPVEIF 83
Db ||||||||||||||||||||||||||||
92 DILLSYPANYSDDSKIWRPVEIF 114

RESULT 33
US-10-176-921-172
; Sequence 172, Application US/10176921
; Publication No. US20030027276A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C288
; CURRENT APPLICATION NUMBER: US/10/176,921
; CURRENT FILING DATE: 2002-06-20

; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-921-172

Query Match 100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSLVQPVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

QY 61 DILLSYPANYSDDSKIWRPVEIF 83
Db ||||||||||||||||||||||||||||
92 DILLSYPANYSDDSKIWRPVEIF 114

Search completed: June 14, 2004, 08:05:37
Job time : 25.7434 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 07:56:30 ; Search time 8.4566 Seconds
(without alignments)
944.102 Million cell updates/sec

Title: JS-10-054-988-114_COPY_32_114
Perfect score: 444
Sequence: 1 LPASSLSLVPQVTSYNFG.....LSYFANYSDDSKIWRPVEIF 83

Scoring table: BLOSUM62
Gapop 13.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0
Maximum DB seq length: 20000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : PIR 78:**

1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	72.5	16.3	424	2 AB1034	UV protection prot
2	70	15.8	739	2 T25030	hypothetical prote
3	69.5	15.7	534	2 AB0392	probable carbohydr
4	68.5	15.4	424	2 B38176	samB protein - Sal
5	68	15.3	985	2 T41135	hypothetical prote
6	67.5	15.2	390	2 S56560	hypothetical 43.6K
7	67.5	15.2	390	2 B91291	hypothetical prote
8	67.5	15.2	390	2 D86132	hypothetical prote
9	67	15.1	279	1 B40731	alcohol dehydrogen
10	66.5	15.0	424	2 JQ0661	impB protein - Sal
11	66	14.9	736	2 I51691	dishevelled homolo
12	65.5	14.8	572	2 AD1209	N-acetylmuramoyl-L
13	65.5	14.8	1084	1 S19661	DNA-directed DNA p
14	65.5	14.8	1086	2 T43266	DNA-directed DNA p
15	65.5	14.8	1086	2 T40242	DNA polymerase del
16	64.5	14.5	145	2 H88504	protein B0361.1 li
17	64.5	14.5	226	2 T49719	hypothetical prote
18	64	14.4	385	2 T38113	hypothetical serin
19	63.5	14.3	473	1 RGHY3	regulatory protein
20	63.5	14.3	473	2 T28118	hypothetical prote
21	63	14.2	513	1 T02259	calcium-dependent
22	63	14.2	673	1 S73444	MG032 homolog B01
23	62	14.0	414	2 T15494	aspartate transami
24	62	14.0	452	2 T48998	hypothetical prote
25	61.5	13.9	676	2 AH2195	hypothetical prote
26	61	13.7	325	2 S65306	hypothetical prote
27	61	13.7	1585	2 B69948	phage-related prot
28	60.5	13.6	192	2 I64081	glpG protein homol
29	60.5	13.6	343	2 A75597	mannosyltransferas

30	60.5	13.6	533	1 S56652	calcium-dependent
31	60.5	13.6	677	2 AE1861	serine/threonine k
32	60	13.5	416	2 S52827	hypothetical prote
33	60	13.5	438	2 T32114	hypothetical prote
34	60	13.5	831	2 S44843	K06H7.3 protein -
35	60	13.5	1071	2 T18307	suppressor protein
36	60	13.5	1203	2 T04294	hypothetical prote
37	60	13.5	1633	2 T01879	hypothetical prote
38	59.5	13.4	346	2 T30463	hypothetical prote
39	59.5	13.4	508	2 F86458	unknown protein, 7
40	59.5	13.4	1053	2 S72194	hydroxymethylgluta
41	59.5	13.4	1186	2 T42728	histocompatibility
42	59.5	13.4	1212	2 T42387	histocompatibility
43	59.5	13.4	1331	2 T04938	hypothetical prote
44	59.5	13.4	1495	2 A85240	hypothetical prote
45	59.5	13.4	1495	2 T10649	hypothetical prote
46	59	13.3	98	2 S78727	protein YLL018c-a
47	59	13.3	105	2 S69879	hypothetical prote
48	59	13.3	129	2 AD0255	probable phage ant
49	59	13.3	342	2 A56552	homeotic protein H
50	59	13.3	371	2 T02102	hypothetical prote
51	59	13.3	386	2 S74778	hypothetical prote
52	59	13.3	482	2 T25327	hypothetical prote
53	59	13.3	511	2 E75561	probable phytoene
54	59	13.3	861	2 B49847	nitrate reductase
55	58.5	13.2	129	2 T22430	hypothetical prote
56	58.5	13.2	173	2 S73112	hypothetical prote
57	58.5	13.2	367	2 E75384	conserved hypothet
58	58.5	13.2	425	2 S26623	phosphoglycerate k
59	58.5	13.2	432	2 T06341	acetyl-CoA carboxy
60	58.5	13.2	481	2 T31817	hypothetical prote
61	58.5	13.2	602	2 E64464	hypothetical prote
62	58.5	13.2	640	2 S69546	phosphoenolpyruvat
63	58.5	13.2	1986	2 S28353	probable polyketid
64	58	13.1	86	2 AF0828	probable ferredoxi
65	58	13.1	439	2 T15748	hypothetical prote
66	58	13.1	501	2 T49081	serine-type carbox
67	58	13.1	529	2 G84295	hypothetical prote
68	58	13.1	1197	1 G65010	sensor protein evg
69	57.5	13.0	470	2 S58826	hypothetical prote
70	57.5	13.0	525	1 SYECGU	GMP synthase (glut
71	57.5	13.0	525	2 A91050	GMP synthetase (li
72	57.5	13.0	525	2 F85894	GMP synthetase (g-
73	57.5	13.0	525	2 AF0349	GMP synthetase (glut
74	57.5	13.0	525	2 AD0820	GMP synthetase (glut
75	57.5	13.0	630	2 S77148	hypothetical prote
76	57.5	13.0	840	2 G98169	hypothetical prote
77	57.5	13.0	840	2 AF3117	hypothetical prote
78	57.5	13.0	1023	2 T31669	neural zinc finger
79	57	12.8	201	2 F36861	orf5 protein - Lel
80	57	12.8	255	2 C82578	3-alpha-hydroxyste
81	57	12.8	277	2 E72564	hypothetical prote
82	57	12.8	397	2 E86304	F611.9 protein - A
83	57	12.8	402	2 AI1853	sodium-dependent n
84	57	12.8	412	2 T10671	protein kinase hom
85	57	12.8	510	2 I39930	replication protei
86	57	12.8	514	2 T25509	hypothetical prote
87	57	12.8	781	2 JC7382	DNA-directed DNA P
88	57	12.8	1835	2 I54323	sodium channel alp
89	57	12.8	1836	2 JSC648	sodium channel alp
90	57	12.8	1836	2 I51964	sodium channel alp
91	57	12.8	1836	2 I64893	sodium channel alp
92	56.5	12.7	349	2 A29054	alcohol dehydrogen
93	56.5	12.7	394	2 E70135	flagellar protein
94	56.5	12.7	404	2 A42677	interleukin-1 beta
95	56.5	12.7	426	2 T05676	hypothetical prote
96	56.5	12.7	426	2 D95893	hypothetical trans
97	56.5	12.7	428	2 T34358	zinc finger protei
98	56.5	12.7	472	2 T43084	transfer complex p
99	56.5	12.7	552	2 AB0516	probable ABC trans
100	56.5	12.7	618	2 A71364	probable phosphoen

A;Accession: B69948
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-1585 <KUN>
A;Cross-references: GB:Z99117; GB:AL009126; NID:G2634966; PID:CAH14544.1; PID:e118383
A;Experimental source: strain 168
C;Genetics:
A;Gene: vgbO

Query Match	13.7%;	Score 61;	DB 2;	Length 1585;
Best Local Similarity	26.4%;	Pred. NO. 1.9e+02;		
Matches 19:	Conservative	14;	Mismatches 27;	Indels 12; Gaps 3;

QY	3	ASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKF----	FKEEIRS-DNWLASHLGL	58
		: : : : : : : : : :		
Db	1109	AAVTASVSPIDTS-----SLDEQATSPGQFTKSFQDQIRDNVVSMEAWKQKNVGQ		1160
		: : : : : : : : : :		
QY	59	PPDSLLSYPNY	70	
		: : : : :		
Db	1161	PMNNLISYSPNY	1172	
		: : : : :		

PRATT 28

I64081
 glpG protein homolog - Haemophilus influenzae (strain Rd KW20)
 C:Species: Haemophilus influenzae
 C:Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 08-Oct-1999
 C:Accession: I64081
 R:Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage,
 ; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman,
 , D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M.
 Science 269, 496-512, 1995
 A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter
 A;Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.
 A;Reference number: A64000; MUID:95350630; PMID:7542800
 A;Accession: I64081
 A;Status: nucleic acid sequence not shown; translation not shown
 A;Molecule type: DNA
 A;Residues: 1-192 <TIGR>
 A;Cross-references: GB:U32744; GB:L42023; NID:g1573608; PIDN:AAC22277.1; PID:G1573612;

Query Match 13.6%; Score 60.5; DB 2; Length 192;
Best Local Similarity 30.0%; Pred. No. 22;
Matches 18; Conservative 7; Mismatches 24; Indels 11; Gaps 2;

QY	21	RTFLGLQKNCACIGTSICKFFKEEIRSDNWLASHLGLPPD--SLLSYPNAYSDDSKIWR	78
pb	2	KNEIQQCGKITLITATLQVLY-----LACQLGFEDDLYMLMHPAYEEQDSVWR	52

RESULT 29

mannosyltransferase - Deinococcus radiodurans (strain R1)
C;Species: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 31-Mar-2000
C;Accession: A75597
R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.;
S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
A;Reference number: A75250; MUID:20036896; PMID:10567266
A;Accession: A75597
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-343 <WHI>
A;Cross-references: GB:AE001862; GB:AE001825; NID:g6460468; PIDW:AAF12270.1; PID:g6460
A;Experimental source: strain R1
C;Genetics:
A;Gene: DRA0039
A;Map position: 2

Query Match 13.68; Score 60.5; DB 2; Length 343;

```

QY      7  SSLVPQVRTSY-----NFGRTFLG--LDKCN-ACIGTSICKK-----F 41
      :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db     26  TQLIPLLRGHYRIIKVLSDGGFGRTYLSEDIKLNELCVVKQFAPKVOEHSAMKXAVEL 85
      :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY     42  FKKEIRSDNWLASHLGLPPDSLISY 66
      :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db     86  FKOEACRLOHLGEHOHP--TLLAY 108
      :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

```

RESIST 26

S65306 hypothetical protein YPL273W - yeast (Saccharomyces cerevisiae)
 N;Alternate names: hypothetical protein P0338
 C;Species: Saccharomyces cerevisiae
 C;Date: 10-Dec-1994 #sequence_revision 31-May-1996 #text_change 19-Apr-2002
 C;Accession: S65306; S65327
 R;Duesterhoeft, A.; Floeth, M.; Fritz, M.; Hilbert, H.; Moestl, D.
 submitted to the Protein Sequence Database, May 1996
 A;Reference number: S65292
 A;Accession: S65306
 A;Molecule type: DNA
 A;Residues: 1-325 <DUE>
 A;Cross-references: EMBL:Z73629; NID:G1370562; PID:e246979; MIPS:YPL273W
 A;Experimental source: strain S288C (AB972);
 R;Delius, H.; Hebling, U.
 submitted to the Protein Sequence Database, May 1996
 A;Reference number: S64967
 A;Accession: S65327
 A;Molecule type: DNA
 A;Residues: 1-325
 A;Cross-references: EMBL:Z73629; NID:G1370562; PID:e246979; MIPS:YPL273W
 A;Experimental source: strain S288C (AB972)
 C;Genetics:
 A;Gene: SGD:SAM4
 A;Cross-references: SGD:S0006194
 A;Map position: 16L

Query Match	13.7%;	Score 61;	DB 2;	Length 325;
Best Local Similarity	25.6%;	Pred. No. 35;		
Matches	20:	Conservative	16:	Mismatches
			24:	Indels
			18:	Gaps

QY 6 LSSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEEIRSDNWLAS-HLGPPDSLL 64

ab 212 TROVTKOIGOKINPNESEIGIN---CWSFN-----OSPDILESIOALPNMALL 262

QY 65 SYPAN---YSDDSKIWRP 79
: || : | : || |
263 AYPNSGEVYDTEKIWL P 280

RESULT 27

B69948
phage-related protein homolog yqbO - *Bacillus subtilis*
C/Species: *Bacillus subtilis*
C/Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 15-Oct-1999
C/Accession: B69948
R/Kunst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Bertero, C.; Bron, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Chd, A.; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E. Nature 390, 249-256, 1997
A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Gallen, iech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F.; Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinois, A;Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Maueel, y, M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetelleg, Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon, A;Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Seron, akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstra, P.; Tognoni, A.; Tosato, V.; Uchiyama, T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, A;Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A.
A;Title: The complete genome sequence of the Gram-positive bacterium *Bacillus subtilis*.
A;Reference number: A69580; MUID:98044033; PMID:9384377

Best Local Similarity 40.0%; Pred. No. 42;
Matches 14; Conservative 6; Mismatches 12; Indels 3; Gaps 1;

QY 48 SDNWLASHLGLPPDLSLLSYYPANYSDDSKIWPRVEI 82
| | : | | | : | | : | | | : | | : | | :
Db 121 SKNRIVSHLGVSPDKITVTPL---AASKIFRP IPL 152

RESULT 30
S56652
calcium-dependent protein kinase (EC 2.7.1.1-) 2 - rice
C;Species: Oryza sativa (rice)
C;Date: 14-May-1999 #sequence_revision 14-May-1999 #text_change 11-Jun-1999
C;Accession: S56652
R;Breviario, D.; Morello, L.; Giani, S.
Plant Mol. Biol. 27, 953-967, 1995
A;Title: Molecular cloning of two novel rice cDNA sequences encoding putative calcium-de
A;Reference number: S56651; MUIE:95284352; PMID:7766885
A;Accession: S56652
A;Status: preliminary
A;Molecule type: rRNA
A;Residues: 1-533 <BRE>
A;Cross-references: EMBL:X81394; NID:G587497; PIDN:CAA57157.1; PID:G587498
C;Superfamily: calcium-dependent protein kinase; calmodulin repeat homology; protein kin
C;Keywords: ATP; calcium binding; EF hand; phosphotransferase; serine/threonine-specific
F;83-343/Domain: protein kinase homology <KIN>
F;91-99/Region: protein kinase ATP-binding motif
F;385-417/Domain: calmodulin repeat homology <EF1>
F;421-453/Domain: calmodulin repeat homology <EF2>
F;457-489/Domain: calmodulin repeat homology <EF3>
F;492-524/Domain: calmodulin repeat homology <EF4>
F;114/Active site: Lys #status predicted

Query Match 13.6%; Score 60.5; DB 1; Length 533;
Best Local Similarity 22.7%; Pred. No. 68;
Matches 22; Conservative 17; Mismatches 41; Indels 17; Gaps 3;

QY 2 PASSLSLVPQVQRTSYN-----FGRTFLGLD-----KCNACIGTSICKKFFKEE 45
| | : | | | : | | : | | : | | : | | :
Db 70 PDTILGKLYDDVRSVYSLGKELGRGQFGVTYLCETIASGKQYACKSISKRKLVSADKED 129

QY 46 IRSDNWLASHLGLPPDLSLLSYYPANYSDDSKIWPRVEI 82
| | : | | : | | : | | : | | : | | :
Db 130 IRREIQMQHLS-GQONIVEFRGAYEDKSNVHVVMEL 165

Search completed: June 14, 2004, 08:01:03
Job time : 9.4566 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Ran on: June 14, 2004, 07:51:35 ; Search time 6.57736 Seconds
(without alignments)
657.076 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114
Perfect score: 444
Sequence: 1 LPASSLSLVPQVRTSYNFG.....LSYPANYSDDSKIWRPVEIF 83

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : SwissProt_42:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	68.5	15.4	424	1	SAMB_SALTY
2	67.5	15.2	383	1	YJIM_ECOLI
3	67	15.1	279	1	ADHR_DROGU
4	66.5	15.0	424	1	IMPB_SALTY
5	66	14.9	736	1	DVL2_XENLA
6	65.5	14.8	1086	1	DPOD_SCHPO
7	64	14.4	385	1	YDI6_SCHPO
8	64	14.4	389	1	CL22_HUMAN
9	63.5	14.3	473	1	MA6R_YEAST
10	63.5	14.3	473	1	YS81_CAEEL
11	63	14.2	513	1	CDP2_MAIZE
12	63	14.2	673	1	YA36_MYCPN
13	62.5	14.1	567	1	GPV_RAT
14	62	14.0	342	1	HXCA_HUMAN
15	61	13.7	1585	1	YQBO_BACSU
16	60.5	13.6	192	1	GLPG_HAEIN
17	60.5	13.6	533	1	CDP2_ORYSA
18	60	13.5	416	1	YMW7_YEAST
19	60	13.5	618	1	YMX3_CAEEL
20	60	13.5	1071	1	SEF1_KLULA
21	59.5	13.4	488	1	PAC2_RAT
22	59.5	13.4	497	1	G6PI_LEGPN
23	59.5	13.4	713	1	ZBT1_HUMAN
24	59.5	13.4	713	1	ZBT1_MOUSE
25	59.5	13.4	1053	1	HMDH_SCHPO
26	59.5	13.4	1212	1	UTY_MOUSE
27	59	13.3	105	1	YMG9_YEAST
28	59	13.3	329	1	RECA_MYCPE
29	59	13.3	342	1	HXCA_MOUSE
30	58.5	13.2	173	1	YC37_PORPU
31	58.5	13.2	432	1	ACCD_SOYBN
32	58.5	13.2	433	1	PGKH_SPIOL
33	58.5	13.2	618	1	PPCK_BORBR
					P23832 salmonella
					P39384 escherichia
					Q09007 drosophila
					P18642 salmonella
					P51142 xenopus lae
					P30316 schizosacch
					Q92344 schizosacch
					Q9BZG6 homo sapien
					P10508 saccharomyc
					Q09621 caenorhabdi
					P49101 zea mays (m
					P75078 mycoplasma
					O08770 rattus norv
					Q9NYD6 homo sapien
					P45931 bacillus su
					P44783 haemophilus
					P53683 oryza sativ
					P54730 saccharomyc
					P34511 caenorhabdi
					P87164 kluyveromyc
					Q9GY17 rattus norv
					Q9RDY2 legionella
					Q9Y2K1 homo sapien
					Q91V19 mus musculu
					Q10283 schizosacch
					P79457 mus musculu
					Q04898 saccharomyc
					Q8EVC7 mycoplasma
					P31257 mus musculu
					P51191 porphyra pu
					P49158 glycine max
					P29409 spinacia ol
					Q7WJG3 bordetella

RESULT 1

ALIGNMENTS

Q7wak8 bordetella
Q16822 homo sapien
Q06457 klebsiella
Q03149 emericella
P78344 homo sapien
P30855 escherichia
Q8xab5 escherichia
P04079 escherichia
Q8z4q3 salmonella
Q8zn60 salmonella
Q8zcu4 versinia pe
P15736 simian 11 r
P56677 mus musculu
Q04569 lelystad vi
Q14153 homo sapien
P79398 oryctolagus
P35499 homo sapien
Q9cmz1 pasteurella
Q8izd9 homo sapien
P55561 rhizobium s
Q8d442 vibrio vuln
P08843 emericella
Q8dc51 vibrio vuln
P29466 homo sapien
Q22555 caenorhabdi
Q9ult2 homo sapien
Q83159 treponema p
Q8Y3g3 ralstonia s
P33410 bordetella
Q56273 thiobacillu
P54358 drosophila
Q24640 drosophila
P87257 aspergillus
Q03687 saccharomyc
Q10946 caenorhabdi
P52463 human herpe
P38788 saccharomyc
Q9a8j0 caulobacter
Q9ssy6 cucumis sat
P50642 equine herp
Q67323 aquifex aeo
Q9uJg4 homo sapien
P50703 solanum com
P25871 nicotiana t
Q87c22 xylella fas
Q9pb58 xylella fas
Q9wve8 mus musculu
Q8zt92 pyrobaculum
P41073 drosophila
Q8Yhk8 brucella me
P15436 saccharomyc
P52102 escherichia
P82244 spinacia ol
P42747 arabidopsis
Q9nxj5 homo sapien
Q9esw8 mus musculu
Q9zci0 rickettsia
P25656 saccharomyc
Q9xdm3 aquifex pyr
P52496 candida alb
Q42541 arabidopsis
O26945 methanobact
Q8cqe8 staphylococ
Q9agj6 mycobacteri
Q82i71 streptomyce
O13712 schizosacch
O28310 archaeoglob

1 PPCK_BOR2A
1 PPCM_HUMAN
1 NASA_KLEOX
1 WA_EMENI
1 I4G2_HUMAN
1 EVGS_ECOLI
1 GUAA_ECOL6
1 GUAA_ECOLI
1 GUAA_SALTY
1 GUAA_SALTY
1 GUAA_YERPE
1 VP3_ROTSL
1 ST14_MOUSE
1 YOR5_LELV
1 Y140_HUMAN
1 I4G2_RABIT
1 CIN4_HUMAN
1 Y659_PASMU
1 DOC3_HUMAN
1 Y4MB_RHISN
1 TDH_VIBVU
1 ADH1_EMENI
1 RECA_VIBVU
1 I1BC_HUMAN
1 NH44_CAEEL
1 Z49C_HUMAN
1 PPCK_TREPA
1 PPCK_RALSO
1 FIMC_BORPE
1 SYA_THIFE
1 DPOD_DROME
1 ADHR_DROSU
1 LE3B_ASPNG
1 YMP0_YEAST
1 YMP2_CAEEL
1 UL32_HSV6U
1 YHM4_YEAST
1 HPPA_CAUCR
1 ETR1_CUCSA
1 RIR1_HSV64
1 SYA_AQUAE
1 SAL4_HUMAN
1 OS35_SOLOO
1 OLPA_TOBAC
1 PYRB_XYLEF
1 PYRB_XYLEF
1 PAC2_MOUSE
1 GUAA_PYRAE
1 PEP_DROME
1 SYA_BRUME
1 DPOD_YEAST
1 YFHL_ECOLI
1 RK34_SPIOL
1 UBCE_ARATH
1 PGPI_MOUSE
1 PGPI_MOUSE
1 Y760_RICPR
1 YCY4_YEAST
1 SYA_AQUPY
1 DNLI_CANAL
1 UBCE_ARATH
1 Y857_METTH
1 MQO3_STAEP
1 PPCK_MYCSM
1 PPCK_STRAW
1 YDZ5_SCHPO
1 YJ69_ARCFU

618 1
640 1
866 1
1986 1
907 1
1197 1
525 1
525 1
525 1
525 1
525 1
835 1
855 1
201 1
422 1
907 1
1836 1
1905 1
2030 1
229 1
343 1
349 1
349 1
404 1
428 1
529 1
618 1
622 1
873 1
877 1
1092 1
279 1
371 1
405 1
460 1
484 1
572 1
712 1
740 1
789 1
867 1
1053 1
250 1
251 1
320 1
322 1
486 1
505 1
716 1
885 1
86 1
152 1
167 1
209 1
209 1
373 1
391 1
871 1
928 1
166 1
192 1
496 1
605 1
607 1
844 1
202 1

58.5 13.2
58.5 13.2
58.5 13.2
58.5 13.2
58 13.1
58 13.1
57.5 13.0
57.5 13.0
57.5 13.0
57.5 13.0
57.5 13.0
57.5 13.0
57.5 13.0
57 12.8
57 12.8
57 12.8
57 12.8
57 12.8
56.5 12.7
56.5 12.7
56.5 12.7
56.5 12.7
56.5 12.7
56.5 12.7
56.5 12.7
56 12.6
56 12.6
56 12.6
56 12.6
56 12.6
56 12.6
56 12.6
56 12.6
55.5 12.5
55.5 12.5
55.5 12.5
55.5 12.5
55.5 12.5
55.5 12.5
55.5 12.5
55 12.4
55 12.4
55 12.4
55 12.4
55 12.4
55 12.4
55 12.4
55 12.4
54.5 12.3
54.5 12.3
54.5 12.3
54.5 12.3
54.5 12.3
54.5 12.3
54 12.2

34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

SAMB_SALTY STANDARD; PRT; 424 AA.
 AC P23832;
 DT C1-NOV-1991 (Rel. 20, Created)
 DT C1-NOV-1991 (Rel. 20, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE SAMB protein.
 GN SAMB.
 OS Salmonella typhimurium.
 OG Plasmid 60-mda cryptic.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
 OC Enterobacteriaceae; Salmonella.
 OX NCBI_TaxID=602;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=L22;
 RX MEDLINE=91123176; PubMed=1991707;
 RA Nohmi T., Hakura A., Nakai Y., Watanabe M., Murayama S.Y.,
 RA Sofuni T.;
 RT "Salmonella typhimurium has two homologous but different umuDC
 operons: cloning of a new umuDC-like operon (samAB) present in a
 60-megadalton cryptic plasmid of S. typhimurium.";
 RL J. Bacteriol. 173:1051-1063(1991).
 CC -!- FUNCTION: Involved in UV protection and mutation.
 CC -!- SIMILARITY: Belongs to the DNA polymerase type-Y family.
 CC -!- SIMILARITY: Contains 1 umuC domain.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC
 CC EMBL; D90202; BAA14226.1; -.
 DR PIR; B38176; B38176.
 DR HAMAP; MF 01113; atypical; 1.
 DR InterPro; IPR001126; UMUC_like.
 DR Pfam; PF00817; IMS; 1.
 DR PROSITE; PS50173; UMUC; 1.
 KW plasmid; SOS mutagenesis; DNA repair.
 FT DOMAIN 2 189 UMUC.
 SQ SEQUENCE 424 AA; 47727 MW; F8C47476CC58A2B CRC64;
 Query Match 15.4%; Score 68.5; DB 1; Length 424;
 Best Local Similarity 27.8%; Pred. No. 1.9;
 Matches 20; Conservative 13; Mismatches 36; Indels 3; Gaps 2;
 QY 6 LSSIVPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPDSLILS 65
 DB 88 LEEAPRVE-QYSIDEMFDIRGIDSCIDFDEFGRLREHVRSTGLTIGVGMGPTKTLA 146
 QY 66 YPANYSDDSKIIN 77
 DB 147 KSAQWA--SKEN 156
 RESULT 2
 YJIM_ECOLI STANDARD; PRT; 383 AA.
 AC P39384;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Hypothetical protein yjim.
 GN YJIM OR B4335.
 OS Escherichia coli.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
 OC Enterobacteriaceae; Escherichia.
 OX NCBI_TaxID=562;
 RN [1]
 RP SEQUENCE FROM N.A.

RC STRAIN=X12 / MG1655;
 RX MEDLINE=95334362; PubMed=7610040;
 RA Burland V.D., Plunkett G. III, Sofia H.J., Daniels D.L.,
 RA Blattner F.R.;
 RT "Analysis of the Escherichia coli genome VI: DNA sequence of the
 RT region from 92.8 through 100 minutes.";
 RL Nucleic Acids Res. 23:2105-2119(1995).
 CC -!- SIMILARITY: STRONG, TO M.JANNASCHII MJ0007.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC
 CC EMBL; U14003; AAA97231.1; ALT_INIT.
 DR EMBL; AEO00504; AAC77291.1; ALT_INIT.
 DR EcoGene; EGI2574; Yjim.
 KW Hypothetical protein; Complete proteome.
 SQ SEQUENCE 383 AA; 42742 MW; 701CBE69D0BFDACC CRC64;
 Query Match 15.2%; Score 67.5; DB 1; Length 383;
 Best Local Similarity 24.4%; Pred. No. 2.2;
 Matches 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;
 QY 8 SLVPQVRTSYNFGRTFLGLDKC-----NACIGTSIC---KKFFKEIRSDNWLASHLGL 58
 DB 76 NLCPLIKSSYGFGKT----DKCPYFYFSDLVVGTTCDGKKQWYE-----YMAE---F 121
 QY 59 PPSLLSYPPANYSDDSK--IWR 78
 DB 122 KPVHVMQLPNSVKDDASRALWK 143
 RESULT 3
 ADHR_DROGU STANDARD; PRT; 279 AA.
 AC Q09007;
 DT C1-OCT-1994 (Rel. 30, Created)
 DT 01-OCT-1994 (Rel. 30, Last sequence update)
 DT 01-OCT-1996 (Rel. 34, Last annotation update)
 DE Alcohol dehydrogenase related 31 kDa protein.
 GN ADHR OR ADH-DUP.
 OS Drosophila guanche (Fruit fly).
 OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 OC Ephydroidea; Drosophilidae; Drosophila.
 OX NCBI_TaxID=7266;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=94362951; PubMed=8081544;
 RA Marfany G., Gonzalez-Duarte R.;
 RT "Characterization and evolution of the Adh genomic region in
 RT Drosophila guanche and Drosophila madeirensis.";
 RL Mol. Phylogenet. Evol. 2:13-22(1993).
 CC -!- SIMILARITY: Belongs to the short-chain dehydrogenases/reductases
 CC (SDR) family.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC
 CC EMBL; X60113; CAA42712.1; -.
 DR PIR; B40731; B40731.
 DR HSSP; P10807; 1B16.
 DR FlyBase; FBgn0012325; Dqua\Adhr.
 DR InterPro; IPR002198; ADH_short.


```
DR PROSITE; PS50106; PDZ; 1.
KW Wnt signaling pathway; Developmental protein.
FT DOMAIN 1 82 DIX.
FT DOMAIN 99 113 POLY-PRO.
FT DOMAIN 222 227 POLY-ARG.
FT DOMAIN 254 326 PDZ.
FT DOMAIN 428 502 DEP.
FT DOMAIN 680 687 POLY-PRO.
SQ SEQUENCE 736 AA; 79787 MW; AF6C9A1662DD7CEB CRC64;

Query Match
Best Local Similarity 14.9%; Score 66; DB 1; Length 736;
Matches 23; Conservative 33.3%; Pred. No. 7.1;
Matches 23; Conservative 2; Mismatches 22; Indels 22; Gaps 2;

QY 22 TFLGLDKNCACIGTSICKKFF-----KKEIRSDN-----WLASHLGLP 59
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
Db 26 TDIRLRDFKAALGRGHAKYFFKAMDQDFGVYKKEISDDNAKLPFCFNDRVVSWLASSEGSQ 85
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |

QY 60 PDSLLSYPA 68
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
Db 86 PDSAPPAPA 94
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |

RESULT 6
DPOD SCHPO
ID DPOD SCHPO STANDARD; PRT; 1086 AA.
AC P30316; Q10016; Q9USU0; Q9UU61;
DT 01-APR-1993 (Rel. 25, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE DNA polymerase delta catalytic subunit (EC 2.7.7.7) (DNA polymerase
III).
GN POL3 OR PCLD OR SPBC336.04.
OS Schizosaccharomyces pombe (Fission yeast).
OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
OC Schizosaccharomycetales; Schizosaccharomycetaceae;
OC Schizosaccharomycetes.
OX NCBI_TaxID=4896;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92371954; PubMed=1960723;
RA Pignede G., Bouvier D., de Recondo A.M., Baldacci G.;
RT "Characterization of the POL3 gene product from Schizosaccharomycetes
pombe indicates inter-species conservation of the catalytic subunit
of DNA polymerase delta."
RL J. Mol. Biol. 222:209-218(1991).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=93184400; PubMed=8443413;
RA Park H., Francesconi S., Wang T.S.F.;
RT "Cell cycle expression of two replicative DNA polymerases alpha and
delta from Schizosaccharomycetes pombe."
RL Mol. Biol. Cell 4:145-157(1993).
RN [3]
RP SEQUENCE FROM N.A.
RX STRAIN=972;
EX MEDLINE=21848401; PubMed=11859360;
RA Wood V., Gwilliam R., Rajandream M.A., Lyne M., Lyne R., Stewart A.,
RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Oliver K., O'Neil S., Pearson D., Quail M.A., Rabinowitsch E.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Gabel C., Fuchs M., Fritz C., Holzer E., Moestl D., Hilbert H.,
RA Borzym K., Janger I., Beck A., Lehrach E., Reinhardt R., Pohl T.M.,
```

```
RA Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Galibert F., Aves S.-J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
RA Cerrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RA Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.;
RT "The genome sequence of Schizosaccharomycetes pombe."
RL Nature 415:871-880(2002).
RN [4]
RP SEQUENCE OF 272-455 FROM N.A.
RC STRAIN=968 h90;
RX MEDLINE=20223868; PubMed=10759889;
RA Ding D.-Q., Tomita Y., Yamamoto A., Chikashige Y., Haraoguchi T.,
RA Hiraoka Y.;
RT "Large-scale screening of intracellular protein localization in living
fission yeast cells by the use of a GFP-fusion genomic DNA library."
RL Genes Cells 5:169-190(2000).
CC -!- FUNCTION: This polymerase possesses two enzymatic activities: DNA
CC synthesis (polymerase) and an exonucleolytic activity that
CC degrades single stranded DNA in the 3' to 5' direction.
CC -!- CATALYTIC ACTIVITY: N deoxynucleoside triphosphate = N diphosphate
CC + [DNA] (N).
CC -!- SUBUNIT: HETEROTETRAMER THAT CONSIST OF THE POL3, CDC1, CDC27 AND
CC CDM1 SUBUNITS. THE POL3 SUBUNIT CONTAINS THE POLYMERASE ACTIVE
CC SITE AND MOST LIKELY THE ACTIVE SITE FOR THE 3'-5' EXONUCLEASE
CC ACTIVITY.
CC -!- SUBCELLULAR LOCATION: Nuclear.
CC -!- MISCELLANEOUS: In eukaryotes there are five DNA polymerases:
CC alpha, beta, gamma, delta, and epsilon which are responsible for
CC different reactions of DNA synthesis.
CC -!- SIMILARITY: Belongs to the DNA polymerase type-B family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; X59278; CAA41968.1; -
CC EMBL; L07734; AAA35303.1; -
CC EMBL; AL121815; CAB58156.1; -
CC EMBL; AB027796; BAA87100.1; -
CC PIR; S19661; S19661.
CC PIR; T40242; T40242.
CC PIR; T43266; T43266.
CC GeneDB SPombe; SPBC336.04; -
CC GO; GO:0005717; C:chromatin; ISS.
CC GO; GO:0005694; C:chromosome; ISS.
CC GO; GO:0005657; C:replication fork; ISS.
CC GO; GO:0007049; P:cell cycle; ISS.
CC GO; GO:0006260; P:DNA replication; ISS.
CC GO; GO:0007067; P:mitosis; ISS.
CC InterPro; IPR006172; DNA_pol_B.
CC InterPro; IPR006134; DNA_pol_B_dom.
CC InterPro; IPR006133; DNA_pol_B_exo.
CC InterPro; IPR004578; Pol2.
CC Pfam; PF00136; DNA_pol_B; 1.
CC Pfam; PF03104; DNA_pol_B_exo; 1.
CC PRINTS; PR00106; DNAPOLB.
CC SMART; SM00486; POLBC; 1.
CC TIGRfams; TIGR00592; pol2; 1.
CC PROSITE; PS00116; DNA POLYMERASE B; 1.
KW Transferase; DNA-directed DNA polymerase; DNA replication;
KW DNA-binding; Hydrolase; Exonuclease; Zinc-finger; Nuclear protein.
FT ZN_FING 993 1011 C4-TYPE (POTENTIAL).
FT ZN_FING 1040 1058 C4-TYPE (POTENTIAL).
FT CONFLICT 102 102 Q -> E (IN REF. 1).
FT CONFLICT 290 290 K -> Q (IN REF. 4).
FT CONFLICT 419 419 T -> S (IN REF. 1).
```

FT CONFLICT 545 545 R -> C (IN REF. 1 AND 2).
FT CONFLICT 777 784 KLEFEKVY -> NWSFST (IN REF. 1).
FT CONFLICT 866 866 L -> H (IN REF. 1).
SQ SEQUENCE 1086 AA; 123568 MW; 99F528413220C3CA CRC64;

Query Match 14.8%; Score 65.5; DB 1; Length 1086;
Best Local Similarity 27.7%; Pred. No. 13;
Matches 18; Conservative 13; Mismatches 33; Indels 1; Gaps 1;

QY 2 PASSLSLVQVRSYNGFRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGLPPD 61
DB 317 PVIQIASIVTQYGDSTPFVRNVFCVDTCSQIVGTQVYEFQNGAEMLS-SWSKFVRDVPD 375

QY 62 SLISY 66
DB 376 VLIQY 380

RESULT 7
YDI6 SCHPO STANDARD; PRT; 385 AA.
AC Q92344;
DT C1-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Hypothetical protein ClF8.06 in chromosome I.
GN SPAC1F8.06.
OS Schizosaccharomyces pombe (Fission yeast).
OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
OC Schizosaccharomycetales; Schizosaccharomycetaceae;
OC Schizosaccharomycetes.
OX NCBI_TaxID=4896;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=972;
RX MEDLINE=21848401; PubMed=11859363;
RA Wood V., Gwilliam R., Rajandream M.A., Lyne M., Lyne R., Stewart A.,
RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
RA McConney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Oliver K., O'Neill S., Pearson D., Quail M.A., Rabinowitsch E.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymorpres B.,
RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Gabel C., Fuchs M., Fritz C., Holzer E., Moestl D., Hilbert H.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Galibert F., Aves S.J., Xiang Z., Hurt C., Moore K., Hurst S.M.,
RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
RA Cerrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RA Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.;
RT "The genome sequence of Schizosaccharomyces pombe";
RL Nature 415:871-880(2002).
CC -!- SIMILARITY: TO THE C-TERMINAL OF S.POMBE SPAC8A4.02C.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announcement/>
CC or send an email to license@isb-sib.ch).

DR EMBL; Z81312; CAB03600.1; -.

DR PIR; T38113; T38113.
DR GeneDB SPombe; SPAC1F8.06; -.
KW Hypothetical protein.
FT DOMAIN 20 136 SER-RICH.
SQ SEQUENCE 385 AA; 41000 MW; 88A58F377701F5C4 CRC64;

Query Match 14.4%; Score 64; DB 1; Length 385;
Best Local Similarity 29.3%; Pred. No. 5.8;
Matches 24; Conservative 14; Mismatches 34; Indels 10; Gaps 4;

QY 3 ASSLSLVQ--VRSYN--FGRTFLGLDKCNACIGTSICKKFFKEEIRSDNWLASHLGL 58
DB 127 SSSISSTVSTPVSSTIYSGTSTGTFVSSTTYQVIPTQIC-----DGVRLGLEYAVNYDL 181

QY 59 PPDLSLLSYAN-YSDESKIWRP 79
DB 182 PSESTFCHPSNGYTEVSTFNKP 203

RESULT 8
CL22 HUMAN STANDARD; PRT; 989 AA.
ID CL22 HUMAN
AC Q9BZQ6; Q9HCW1;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Putative alpha-mannosidase Clorf22 (EC 3.2.1.-).
GN CLORF22.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21218927; PubMed=11318611;
RA Sood R., Bonner T.I., Makalowska I., Stephan D.A., Robbins C.M.,
RA Connors T.D., Morgenbesser S.D., Su K., Faruque M.U., Pinkett H.,
RA Graham C., Baxevaris A.D., Klinger K.W., Landes G.M., Trent J.M.,
RA Carpten J.D.;
RT "Cloning and characterization of 13 novel transcripts and the human
RT RGS8 gene from the 1q25 region encompassing the hereditary prostate
RT cancer (HPC1) locus";
RL Genomics 73:211-222(2001).
RN [2]
RP SEQUENCE OF 16-469 FROM N.A.
RA Cobley V.;
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to family 47 of glycosyl hydrolases.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announcement/>
CC or send an email to license@isb-sib.ch).

DR EMBL; AF288393; AAG60613.1; -.
DR EMBL; AL096819; CAC03447.1; -.
DR HSSP; P32906; 1DL2.
DR Genew; HGNC:16787; Clorf22.
DR InterPro; IPR000886; ER_target_S.
DR InterPro; IPR001382; Glyco_hydro_47.
DR InterPro; IPR003137; PA.
DR Pfam; PF01532; Glyco_hydro_47; 1.
DR Pfam; PF02225; PA; 1.
DR PRINTS; PR00747; GLYHDLASE47.
DR PRODOM; PD003239; Glyco_hydro_47; 1.
DR PROSITE; PS00014; ER_TARGET; 1.
KW Hypothetical protein; Hydrolase; Glycosidase; Glycoprotein;
KW Endoplasmic reticulum.
FT SITE 886 889 PREVENT SECRETION FROM ER (POTENTIAL).
FT CARBOHYD 75 75 N-LINKED (GLCNAC. .) (POTENTIAL).

CC factor receptor and mediates von Willebrand factor-dependent
CC platelet adhesion to blood vessels. The adhesion of platelets to
CC injured vascular surfaces in the arterial circulation is a
CC critical initiating event in hemostasis (By similarity).
CC
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- SIMILARITY: Contains 14 leucine-rich (LRR) repeats.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; Z69594; CAA93440.1; -.
CC InterPro; IPR001611; LRR.
CC InterPro; IPR000483; LRR_Cterm.
CC InterPro; IPR000372; LRR_Nterm.
CC InterPro; IPR003591; LRR_typ.
CC Pfam; PF00560; LRR; 13.
CC Pfam; PF01463; LRRCT; 1.
CC PRINTS; PR00019; LEURICHRPT.
CC SMART; SM00369; LRR_TYP; 10.
CC SMART; SM00082; LRRCT; 1.
CC SMART; SM00013; LRRNT; 1.
KW Platelet; Transmembrane; Glycoprotein; Blood coagulation;
KW Repeat; Leucine-rich repeat; Cell adhesion; Signal.
FT SIGNAL 1 16
FT CHAIN 17 567
FT DOMAIN 17 522
FT TRANSMEM 523 543
FT DOMAIN 544 567
FT REPEAT 73 96
FT REPEAT 97 120
FT REPEAT 122 144
FT REPEAT 145 168
FT REPEAT 169 192
FT REPEAT 194 216
FT REPEAT 217 240
FT REPEAT 241 264
FT REPEAT 266 288
FT REPEAT 289 312
FT REPEAT 314 337
FT REPEAT 338 361
FT REPEAT 362 385
FT REPEAT 387 409
FT CARBOHYD 51 51
FT CARBOHYD 181 181
FT CARBOHYD 243 243
FT CARBOHYD 298 298
FT CARBOHYD 312 312
FT CARBOHYD 385 385
FT CARBOHYD 498 498
SQ SEQUENCE 567 AA; 63344 MW; CA10708E0D03707E CRC64;

Query Match 14.1%; Score 62.5; DB 1; Length 567;
Best Local Similarity 30.3%; Pred. No. 14;
Matches 20; Conservative 7; Mismatches 32; Indels 7; Gaps 2;

QY 24 LGLDKCNACIG-TSICKKFFKEIRSDNWLASHLGLPPDLSLSY-----PAMYSDDSKI 76
DB 443 LGRDEPPQCNGPESRASLTFFWELQDQWCPSSRGLPDPPTENALKAPDPTQRPNSSQS 502

QY 77 WRPVEI 82
DB 503 WAWVQL 508

RESULT 14
HXCA HUMAN
ID HXCA HUMAN STANDARD; PRT; 342 AA.
AC Q9NYD6; O15219; O15220; Q9BVD5;

DT 16-OCT-2001 (Rel. 40, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Homeobox protein Hox-C10.
GN HOXC10.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. PubMed=10835276;
RX MEDLINE=20296799; Gabellini D., Norio P., Giacca M., Peverali F.A.,
RA de Stanchina E., Falaschi A., Biamonti G.;
RT "Selection of homeotic proteins for binding to a human DNA replication
RT origin."
RL J. Mol. Biol. 299:667-680(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Cervix;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ustin T.B., Toshikiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [3]
RP SEQUENCE OF 94-106 AND 258-297 FROM N.A.
RX MEDLINE=98019011; PubMed=9357979;
RA Flagiello D., Gibaud A., Dutrillaux B., Poupon M.F., Malfoy B.;
RT "Distinct patterns of all-trans retinoic acid dependent expression of
RT HOXB and HOXC homeogenes in human embryonal and small-cell lung
RT carcinoma cell lines."
RL FEBS Lett. 415:263-267(1997).
CC -!- FUNCTION: Sequence-specific transcription factor which is part of
CC a developmental regulatory system that provides cells with
CC specific positional identities on the anterior-posterior axis.
CC -!- SUBCELLULAR LOCATION: Nuclear.
CC -!- SIMILARITY: Belongs to the Abd-B homeobox family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF255675; AAF67759.1; -.
CC EMBL; BC001293; AAH01293.1; -.
CC EMBL; X93684; CAA67999.1; -.
CC EMBL; X93685; CAA68000.1; -.
CC HSSP; P02833; 9ANT.
CC TRANSPAC; T03328; -.
CC Genew; HGNC:5122; HOXC10.
CC XIM; 605560; -.
CC GO; GO:0003702; F:RNA polymerase II transcription factor acti. .; TAS.
CC GO; GO:0008284; P:positive regulation of cell proliferation; TAS.

DR InterPro; IPR001356; Homeobox.
DR Pfam; PF00046; homeobox; 1.
DR PRINTS; PR00024; HOMEBOX.
DR ProDom; PD000010; Homeobox; 1.
DR SMART; SM00389; HOX; 1.
DR PROSITE; PS00027; HOMEBOX_1; 1.
DR PROSITE; PS00071; HOMEBOX_2; 1.
KW Homeobox; DNA-binding; Developmental protein; Nuclear protein;
KW Transcription regulation.
FT DNA BIND 268 327 HOMEBOX.
FT CONFLICT 118 118 K -> N (IN REF. 1).
FT CONFLICT 265 265 A -> G (IN REF. 3).
FT CONFLICT 271 271 MISSING (IN REF. 3).
SQ SEQUENCE 342 AA; 38072 MW; BD8127FD43C2A37B CRC64;

Query Match 14.0%; Score 62; DB 1; Length 342;
Best Local Similarity 31.3%; Pred. No. 8.7;
Matches 26; Conservative 9; Mismatches 46; Indels 2; Gaps 2;

QY 1 LPASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRSNDWLASHLGLPP 60
DB 133 LPESCLGEHVPVPSYRASPSYALDKTPHCSGANDFEAPF-EQRASLNPRAEHLESPQ 191

QY 61 -DSLLSYPNYSDSDSKIWRPVEI 82
DB 192 LGGKVSPFETPKSDSQTPSPNEI 214

RESULT 15
YQBO BACSU STANDARD; PRT; 1585 AA.
AC P45931;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Hypothetical protein yqbo.
GN YQBO OR BSU26030.
OS Bacillus subtilis.
OC Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
OX NCBI_TaxID=1423;
[1]
RP SEQUENCE FROM N.A.
RC STRAIN=168 / JH642;
RX MEDLINE=95219086; PubMed=7704261;
RA Takemaru K.-I., Mizuno M., Sato T., Takeuchi M., Kobayashi Y.;
RT "Complete nucleotide sequence of a skin element excised by DNA
RT rearrangement during sporulation in Bacillus subtilis.";
RL Microbiology 141:323-327(1995).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=168 / JH642;
RX MEDLINE=97124195; PubMed=8969508;
RA Mizuno M., Masuda S., Takemaru K.-I., Hosono S., Sato T., Takeuchi M.,
RA Kobayashi Y.;
RT "Systematic sequencing of the 283 kb 210 degrees-232 degrees region of
RT the Bacillus subtilis genome containing the skin element and many
RT sporulation genes.";
RL Microbiology 142:3103-3111(1996).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=168;
RX MEDLINE=98044033; PubMed=9384377;
RA Kunst F., Ogasawara N., Moszer I., Albertini A.M., Alloni G.,
RA Azevedo V., Boursier L., Bessieres P., Bolotin A., Borchert S.,
RA Borriess R., Boursier L., Brans A., Braun M., Brignell S.C., Bron S.,
RA Breuillet S., Bruschi C.V., Caldwell B., Capuano V., Carter N.M.,
RA Chci S.K., Codani J.J., Connerton I.F., Cummings N.J., Daniel R.A.,
RA Denizot F., Devine K.M., Dusterhoft A., Ehrlich S.D., Emerson P.T.,
RA Entian K.D., Errington J., Fabret C., Ferrari E., Foulger D.,
RA Fritz C., Fujita M., Fujita Y., Fuma S., Galizzi A., Galleron N.,
RA Ghim S.Y., Glaser P., Goffeau A., Golightly E.J., Grandi G.,
RA Guisepi G., Guy B.J., Haga K., Haiech J., Harwood C.R., Henaut A.,
RA Hilbert H., Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,

RA Joris B., Karamata D., Kasahara Y., Klaerr-Blanchard M., Klein C.,
RA Kobayashi Y., Koetter P., Koningsstein G., Krogh S., Kumano M.,
RA Kurita K., Lapidus A., Lardinois S., Lauber J., Lazarevic V.,
RA Lee S.M., Levine A., Liu H., Masuda S., Mauel C., Medigue C.,
RA Medina N., Mellado R.P., Mizuno M., Moestl D., Nakai S., Noback M.,
RA Noone D., O'Reilly M., Ogawa K., Ogiwara A., Oudega B., Park S.H.,
RA Parro V., Pohl T.M., Portetelle D., Porwollik S., Prescott A.M.,
RA Presecan E., Pujic P., Purnelle B., Rapoport G., Rey M., Reynolds S.,
RA Rieger M., Rivolta C., Rocha E., Roche B., Rose M., Sadaie Y.,
RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,
RA Sekiguchi J., Sekowska A., Seror S.J., Seror P., Shin B.S., Soldo B.,
RA Sorokin A., Tacconi E., Takagi T., Takahashi H., Takemaru K.,
RA Takeuchi M., Tamakoshi A., Tanaka T., Terpstra P., Tognoni A.,
RA Tosato V., Uchiyama S., Vandenbol M., Vanier F., Vassarotti A.,
RA Viari A., Wambutt R., Wedler E., Wedler H., Weitzenegger T.,
RA Winters P., Wipat A., Yamamoto H., Yamane K., Yasumoto K., Yata K.,
RA Yoshida K., Yoshikawa H.F., Zumstein E., Yoshikawa H., Danchin A.;
RT "The complete genome sequence of the Gram-positive bacterium Bacillus
RT subtilis.";
RL Nature 390:249-256(1997).
RN [4]
RP IDENTIFICATION.
RX MEDLINE=96084975; PubMed=7489895;
RA Medigue C., Moszer I., Viari A., Danchin A.;
RT "Analysis of a Bacillus subtilis genome fragment using a co-operative
RT computer system prototype.";
RL Gene 165:GC37-GC51(1995).
CC -1- SIMILARITY: STRONG, TO B. SUBTILIS XKDO.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; D32216; BAA06947.1; -
DR EMBL; D84432; BAA12411.1; -
DR EMBL; Z99117; CAB14544.1; -
DR PIR; B69948; B69948.
DR Subtilist; BG11286; yqbo.
DR InterPro; IPR008258; SLT_dom.
DR Pfam; PF01464; SLT; 1.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 1585 AA; 171030 MW; 1F82AB7F0250735F CRC64;

Query Match 13.7%; Score 61; DB 1; Length 1585;
Best Local Similarity 26.4%; Pred. No. 67;
Matches 19; Conservative 14; Mismatches 27; Indels 12; Gaps 3;

QY 3 ASSLSLVQVQRTSYNFGRTFLGLDKCNACIGTSICKKFFKEEIRS-DNWLASHLGL 58
DB 1109 AAVTASVPIIDTS-----SLDEQATSFQQTFSFGQIRDNVVSMEAWKQKNVQ 1160
QY 59 PPDLSLSYPANY 70
DB 1161 PMNNLISYSPNY 1172

RESULT 16
GLPG_HAEIN STANDARD; PRT; 192 AA.
AC P44783;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Protein glpG homolog.
GN GLPG OR HI0618.
OS Haemophilus influenzae.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pasteurellales;
OC Pasteurellaceae; Haemophilus.
OX NCBI_TaxID=727;

RN SEQUENCE FROM N.A.
RC STRAIN=Rd / KW20 / ATCC 51907;
RX MEDLINE=95350630; PubMed=7542800;
RA Fleischmann R.D., Adams M.D., White O., Clayton R.A., Kirkness E.F.,
RA Kerlavage A.R., Bult C.J., Tomb J.-F., Dougherty B.A., Merrick J.M.,
RA McKenney K., Sutton G., Fitzhugh W., Fields C.A., Gocayne J.D.,
RA Scott J.D., Shirley R., Liu L.-I., Glodek A., Kelley J.M.,
RA Weidman J.F., Phillips C.A., Spriggs T., Hedblom E., Cotton M.D.,
RA Utterback T.R., Hanna M.C., Nguyen D.T., Saudek D.M., Brandon R.C.,
RA Fine L.D., Fritchman J.L., Fuhrmann J.L., Geoghagen M.S.M.,
RA Gnefem C.L., McDonald L.A., Small K.V., Fraser C.M., Smith H.O.,
RA Venter J.C.;
RT "Whole-genome random sequencing and assembly of Haemophilus influenzae
RT Rd.";
RL Science 269:496-512(1995).
CC -!- FUNCTION: Not yet known.
CC -!- SIMILARITY: TO E.COLI GLPG.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U32744; AAC22277.1; -.
DR PIR; I64081; I64081.
DR TIGR; H10618; -.
DR InterPro; IPR002610; Peptidase_S54.
DR Pfam; PF01694; Rhomboid; 1.
DR GlyceroL metabolism; Complete proteome.
KW GlyceroL metabolism; Complete proteome.
SQ SEQUENCE 192 AA; 21657 MW; B76A7A658037217E CRC64;

Query Match 13.6%; Score 60.5; DB 1; Length 192;
Best Local Similarity 30.0%; Pred. No. 6.7;
Matches 18; Conservative 7; Mismatches 24; Indels 11; Gaps 2;

QY 21 RTFLGLDKNACIGTSICKFFKEIRSDNWLASHLGLPPD--SLLSYPANYSDDSK--WR 78
Db 2 KNFLAQGGKITLILTALCVLIY-----LAQLGFEDDIMLHMYPAYEQDSEVMR 52

RESULT 17
CDP2_ORYSA STANDARD; PRT; 533 AA.
AC P53683;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Calcium-dependent protein kinase, isoform 2 (EC 2.7.1.1-) (CDPK 2).
GN CPK2.
OS Oryza sativa (Rice).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzeae; Oryza.
CX NCBI_TaxID=4530;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. Arborio; TISSUE=Coleoptile;
RX MEDLINE=95284352; PubMed=7766885;
RA Breviario D., Morello L., Giani S.;
RT "Molecular cloning of two novel rice cDNA sequences encoding putative
RT calcium-dependent protein kinases.";
RL Plant Mol. Biol. 27:953-967(1995).
CC -!- FUNCTION: May play a role in signal transduction pathways that
CC involve calcium as a second messenger.
CC -!- ENZYME REGULATION: Activated by calcium (By similarity).
CC -!- MISCELLANEOUS: There are multiple CDPK isoforms in rice.
CC -!- SIMILARITY: Belongs to the Ser/Thr family of protein kinases. CamK
CC subfamily.
CC -!- SIMILARITY: Contains 4 EF-hand calcium-binding domains.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; XE1394; CAA57157.1; -.
DR PIR; S56652; S56652.
DR HSSP; Q63450; 1A06.
DR Gramene; P53683; -.
DR InterPro; IPR002048; EF-hand.
DR InterPro; IPR000719; Prot_kinase.
DR InterPro; IPR008271; Ser_thr_pkin_AS.
DR InterPro; IPR002290; Ser_thr_pkinase.
DR Pfam; PF00036; ehand; 4.
DR Pfam; PF00069; pkinase; 1.
DR ProDom; PD000012; EF-hand; 2.
DR ProDom; PD000001; Prot_kinase; 1.
DR SMART; SM00054; EFh; 4.
DR SMART; SM00220; S_TKC; 1.
DR PROSITE; PS00018; EF_HAND; 4.
DR PROSITE; PS00107; PROTEIN_KINASE_ATP; 1.
DR PROSITE; PS00138; PROTEIN_KINASE_ST; 1.
DR PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW Transferase; Serine/threonine-protein kinase; ATP-binding;
KW Calcium-binding; Phosphorylation; Multigene family.
FT DOMAIN 85 343 PROTEIN KINASE.
FT NP_BIND 91 99 ATP (BY SIMILARITY).
FT BINDING 114 114 ATP (BY SIMILARITY).
FT ACT_SITE 209 209 BY SIMILARITY.
FT CA_BIND 398 409 EF-HAND 1 (POTENTIAL).
FT CA_BIND 434 445 EF-HAND 2 (POTENTIAL).
FT CA_BIND 470 481 EF-HAND 3 (POTENTIAL).
FT CA_BIND 505 516 EF-HAND 4 (POTENTIAL).
SQ SEQUENCE 533 AA; 59522 MW; D0BC570ABD289E28 CRC64;

Query Match 13.6%; Score 60.5; DB 1; Length 533;
Best Local Similarity 22.7%; Pred. No. 22;
Matches 22; Conservative 17; Mismatches 41; Indels 17; Gaps 3;

QY 2 PASSLSLVQPVRTSYN-----FCRTFLGLD-----KCNACIGTSICKFFKEE 45
Db 70 PDTILGKLYDDVRSVYSLGKELGRGQFGVYTLCTEIASGKQYACKSISKRLVSKADKED 129

QY 46 IRSDNWLASHLGLPPDLSLLSYPANYSDDSKIMRPVEI 82
Db 130 IRREIQIMQHLS-GQQNIVEFRGAYEDSKSNVHVVMEL 165

RESULT 18
YMW7_YEAST STANDARD; PRT; 416 AA.
ID YMW7_YEAST
AC P54730;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Hypothetical protein YMR067C.
GN YMR067C OR YM9916.06C.
OS Saccharomyces cerevisiae (Baker's yeast).
OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
OX NCBI_TaxID=4932;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=S288c / AB972;
RX MEDLINE=97313268; PubMed=9169872;
RA Bowman S., Churcher C.M., Badcock K., Brown D., Chillingworth T.,
RA Connor R., Dedman K., Devlin K., Gentles S., Hamlin N., Hunt S.,
RA Jagels K., Lye G., Moule S., Odell C., Pearson D., Rajandream M.A.,
RA Rice P., Skelton J., Walsh S., Whitehead S., Barrell B.G.;

RT "The nucleotide sequence of Saccharomyces cerevisiae chromosome XIII.";
 RL Nature 387:90-93(1997).
 CC -!- SIMILARITY: Contains 1 UBX domain.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; Z48952; CAA88792.1; -;
 DR PIR; S52827; S52827.
 DR GermOnline; 142733; -;
 DR SGD; S0004671; YMR067C.
 DR InterPro; IPR001012; UBX.
 DR Pfam; PF00789; UBX; 1.
 DR SMART; SM00166; UBX; 1.
 DR PROSITE; PS00033; UBX; 1.
 DR Hypothetical protein.
 KW DOMAIN 273 350 UBX.
 FT SEQUENCE 416 AA; 46965 MW; 615E5F8EC1DCDD31 CRC64;
 SQ
 Query Match 13.5%; Score 60; DB 1; Length 416;
 Best Local Similarity 27.5%; Pred. No. 19;
 Matches 19; Conservative 10; Mismatches 24; Indels 16; Gaps 3;
 QY 10 VPQVRTSYNFGRTFLGLDKCNACIGTSTI-----CKKFFKEEIRSDNWLASHLGLP----- 59
 DB 1 MPMTVTKYNF-----QLFKCKVSLNSTLNDVLHQSIQFFQLHTSSNDWSLIHLDKPVPLD 55
 QY 60 -PDSLLSY 67
 DB 56 LPWRLNLP 64
 RESULT 19
 YMX3 CAEEL STANDARD; PRT; 618 AA.
 AC P34511;
 DT 01-FEB-1994 (Rel. 28, Created)
 DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Hypothetical protein K06H7.3 in chromosome III.
 GN K06H7.3.
 OS Caenorhabditis elegans.
 OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditioidea;
 OC Rhabditidae; Peloderinae; Caenorhabditis.
 OX NCBI_TaxID=6239;
 RN [1]
 RF SEQUENCE FROM N.A.
 RC STRAIN=Bristol N2;
 RX MEDLINE=94150718; PubMed=7906398;
 RA Wilson R., Ainscough R., Anderson K., Baynes C., Berks M., Coulson A.,
 RA Bonfield J., Burton J., Connell M., Copsey T., Cooper J., Fraser A.,
 RA Craxton M., Dear S., Du Z., Durbin R., Favell A., Fraser A.,
 RA Fulton L., Gardner A., Green P., Hawkins T., Hillier L., Jier M.,
 RA Johnston L., Jones M., Kershaw J., Kirsten J., Laister N.,
 RA Latreille P., Lightning J., Lloyd C., Mortimore B., O'Callaghan M.,
 RA Parsons J., Percy C., Rifken L., Roopra A., Saunders D., Showkeen R.,
 RA Sims M., Smaldon N., Smith A., Smith M., Sonnhammer E., Staden R.,
 RA Sulston J., Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K.,
 RA Waterston R., Watson A., Weinstein L., Wilkinson-Sproat J.,
 RA Wchldman P.;
 RT "2.2 Mb of contiguous nucleotide sequence from chromosome III of C.
 RT elegans.";
 RL Nature 368:32-38 (1994).
 RN [2]
 RP REVISIONS.
 RA Waterston R.;
 RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.

CC -!- SIMILARITY: TO ISOPENTENYL-DIPHOSPHATE DELTA ISOMERASE.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; L15314; AAF99988.2; -;
 DR PIR; S44843; S44843.
 DR WormPep; K06H7.3; CE25044.
 KW Hypothetical protein.
 SQ SEQUENCE 618 AA; 71320 MW; DE6A695E14F6EAE4 CRC64;
 Query Match 13.5%; Score 60; DB 1; Length 618;
 Best Local Similarity 31.5%; Pred. No. 30;
 Matches 17; Conservative 7; Mismatches 22; Indels 8; Gaps 2;
 QY 22 TFLGLDKCNACIGTSTICKKFFKEEIRSDNWLASHLGLPDSLLSYPNYSDSK 75
 DB 440 TELHVSAN--DARXCLKFLFEVNCDSSTKDCAGLPP-----YSSANSVDVX 485
 RESULT 20
 SEF1_KLULA STANDARD; PRT; 1071 AA.
 AC P87164;
 DT 15-JUL-1998 (Rel. 36, Created)
 DT 15-JUL-1998 (Rel. 36, Last sequence update)
 DT 15-JUL-1998 (Rel. 36, Last annotation update)
 DE Suppressor protein SEF1.
 GN SEF1.
 OS Kluyveromyces lactis (Yeast).
 OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
 OC Saccharomycetales; Saccharomycetaceae; Kluyveromyces.
 OX NCBI_TaxID=28985;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=98144791; PubMed=9483797;
 RA Groom K.R., Heyman H.C., Steffen M.C., Hawkins L., Martin N.C.;
 RT "Kluyveromyces lactis SEF1 and its Saccharomyces cerevisiae homologue
 RT bypass the unknown essential function, but not the mitochondrial
 RT RNase P function, of the S. cerevisiae RPM2 gene.";
 RL Yeast 14:77-87(1998).
 CC -!- FUNCTION: NOT KNOWN. SUPPRESSES THE LETHAL PHENOTYPE OF RPM2
 CC DELETION.
 CC -!- SUBCELLULAR LOCATION: Nuclear (Probable).
 CC -!- SIMILARITY: Contains 1 Zn(2)-Cys(6) fungal-type binuclear cluster
 CC domain.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; U92898; AAC39353.1; -;
 DR PIR; T18307; T18307.
 DR InterPro; IPR007219; Fungal trans.
 DR InterPro; IPR001138; Fungi_Tn.
 DR Pfam; PF04082; Fungal_trans; 1.
 DR Pfam; PF00172; Zn_clus; 1.
 DR SMART; SM00066; GAL4; 1.
 DR PROSITE; PS00463; ZN2_CY6_FUNGAL_1; 1.
 DR PROSITE; PS50048; ZN2_CY6_FUNGAL_2; 1.
 KW Transcription regulation; DNA-binding; Nuclear protein; Zinc;
 KW Metal-binding.
 FT DNA BIND 86 116 ZN(2)-CYS(6), FUNGAL-TYPE.
 SQ SEQUENCE 1071 AA; 120031 MW; 92CB05A3F703FB53 CRC64;

```
Query Match      13.5%; Score 60; DB 1; Length 1071;
Best Local Similarity 33.9%; Pred. No. 56;
Matches 20; Conservative 6; Mismatches 11; Indels 22; Gaps 4;

QY 21 RTFLGLKNCACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSY---PANYSDDSKI 76
    |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::
DB 475 RTWLGI-----FFAEQL-----W-ASILGLPPTSQTDILIEKARLGDGEE 514

RESULT 21
PAC2 RAT
ID PAC2 RAT STANDARD; PRT; 488 AA.
AC Q9QY17; Q9QY18; Q9QY19; Q9QY20;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Protein kinase C and casein kinase substrate in neurons 2 protein
DE (Synaptic dynamin-associated protein II) (Syndapin 2) (Syndapin-II)
DE (SdpII).
GN PACSIN2.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2; 3 AND 4).
RC STRAIN=Sprague-Dawley; TISSUE=Brain;
RX MEDLINE=20171438; PubMed=10704453;
RA Qualmann B., Kelly R.B.;
RT "Syndapin isoforms participate in receptor-mediated endocytosis and
RT actin organization."
RL J. Cell Bio. 148:1047-1062(2000).
RN [2]
RP FUNCTION.
RX PubMed=11082044;
RA Modregger J., Ritter B., Witter B., Paulsson M., Plomann M.;
RT "All three PACSIN isoforms bind to endocytic proteins and inhibit
RT endocytosis."
RL J. Cell Sci. 113:4511-4521(2000).
CC -!- FUNCTION: May play a role in vesicle formation and transport.
CC -!- SUBUNIT: Homo- and hetero-aggregates with other PACSINS. Binds
CC dynamin 1, synaptotagmin, synapsin 1 and the neural Wiskott-Aldrich
CC syndrome protein (N-WASP).
CC -!- SUBCELLULAR LOCATION: Cytoplasmic. Vesicle-like cytoplasmic
CC distribution.
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=4;
CC Name=1; Synonyms=Aa;
CC IsoId=Q9QY17-1; Sequence=Displayed;
CC Name=2; Synonyms=Ab;
CC IsoId=Q9QY17-2; Sequence=VSP_004519;
CC Name=3; Synonyms=Ba;
CC IsoId=Q9QY17-3; Sequence=VSP_004518;
CC Name=4; Synonyms=Bb;
CC IsoId=Q9QY17-4; Sequence=VSP_004518, VSP_004519;
CC -!- TISSUE SPECIFICITY: Ubiquitously expressed. Isoforms 1 and 3 are
CC expressed in pC12 cell line and heart, whereas isoforms 2 and 4
CC are seen in most tissues examined with higher levels of expression
CC in muscle, testis and brain.
CC -!- PTM: Phosphorylated by casein kinase 2 (CK2) and protein kinase C
CC (PKC) (By similarity).
CC -!- SIMILARITY: Belongs to the PACSIN family.
CC -!- SIMILARITY: Contains 1 FCH domain.
CC -!- SIMILARITY: Contains 1 SH3 domain.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/
CC or send an email to license@isb-sib.ch).
```

```
CC -----
DR EMBL; AF139492; AAF22211.1; -
DR EMBL; AF139493; AAF22212.1; -
DR EMBL; AF139494; AAF22213.1; -
DR EMBL; AF139495; AAF22214.1; -
DR HSSP; P29355; 1SEM.
DR InterPro; IPR001060; Cdc15_Fes_CIP4.
DR InterPro; IPR001452; SH3.
DR Pfam; PF00611; FCH; 1.
DR Pfam; PF00018; SH3; 1.
DR PRINTS; PR00452; SH3DOMAIN.
DR ProDom; PD000066; SH3; 1.
DR SMART; SM00055; FCH; 1.
DR SMART; SM00326; SH3; 1.
DR PROSITE; PS50133; FCH; 1.
DR PROSITE; PS50002; SH3; 1.
KW Endocytosis; SH3 domain; Coiled coil; Phosphorylation;
KW Alternative splicing.
FT DOMAIN 11 75 FCH.
FT DOMAIN 428 488 SH3.
FT DOMAIN 184 239 COILED COIL (POTENTIAL).
FT VARSPPLIC 302 303 Missing (in isoform 3 and isoform 4).
FT VARSPPLIC 346 386 /FTId=VSP_004518.
FT VARSPPLIC 346 386 Missing (in isoform 2 and isoform 4).
FT /FTId=VSP_004519.
SQ SEQUENCE 488 AA; 55978 MW; B2975012EFQDF56 CRC64;

Query Match      13.4%; Score 59.5; DB 1; Length 488;
Best Local Similarity 31.6%; Pred. No. 26;
Matches 25; Conservative 18; Mismatches 11; Indels 25; Gaps 7;

QY 2 PASSLSLVP-----QVTSYNGRTFLGLKNCACIGTSICKKFFKEIRSDNWLAS 54
    |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::
DB 343 PSSNLS--VPSNPAQSTQLQSSYN---PFEDDD---TGSSVSE---KEDIKAKN-VSS 389

QY 55 HLGLPPDSLSYPANYSD 73
DB 390 Y-----EKTQNPADWSDD 403

RESULT 22
G6PI_LEGPN
ID G6PI_LEGPN STANDARD; PRT; 497 AA.
AC Q9RDY2;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Glucose-6-phosphate isomerase (EC 5.3.1.9) (GPI) (Phosphoglucose
DE isomerase) (PGI) (Phosphohexose isomerase) (PHI).
GN PGI OR GPI.
OS Legionella pneumophila.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Legionellales;
OC Legionellaceae; Legionella.
OX NCBI_TaxID=446;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=RC1 / Olda / Serogroup 1;
RA Lueneberg E., Zetzmann N., Hartmann M., Knirel Y.A., Kooistra O.,
RA Zaehrer U., Helbig J., Frosch M.;
RT "A 30 kb gene cluster involved in biosynthesis of the virulence
RT associated lipopolysaccharide carbohydrate moiety of Legionella
RT pneumophila."
RT Submitted (JUN-1998) to the EMBL/GenBank/DBJ databases.
CC -!- CATALYTIC ACTIVITY: D-glucose 6-phosphate = D-fructose 6-
CC phosphate.
CC -!- PATHWAY: Involved in glycolysis and in gluconeogenesis.
CC -!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
CC -!- SIMILARITY: Belongs to the GPI family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/
CC or send an email to license@isb-sib.ch).
```


RA Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie B., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA Sandelin A., Schneider C., Sempole C.A., Setou M., Shimada K.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Verardo R., Wagner L., Waflestedt C., Wang Y., Watanabe Y., Wells C.,
RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs";
RL Nature 420:563-573(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Breast tumor;
RX MEDLINE=22388257; PubMed=12477932;
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- FUNCTION: May be involved in transcriptional regulation.
CC -!- SUBCELLULAR LOCATION: Nuclear (Potential).
CC -!- SIMILARITY: Contains 1 BTB/POZ domain.
CC -!- SIMILARITY: Contains 8 C2H2-type zinc fingers.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: AK029762; BAC26603.1; -
DR EMBL: AK035036; BAC28921.1; -
DR EMBL: AK049397; BAC33733.1; -
DR EMBL: BC012239; AAH12239.1; -
DR MGD: MGI:2442326; C430003J21Rik.
DR InterPro: IPR000210; BTB_POZ.
DR InterPro: IPR007087; Znf_C2H2.
DR Pfam: PF00651; BTB; 1.
DR Pfam: PF00096; zf-C2H2; 8.
DR SMART: SM00225; BTB; 1.
DR SMART: SM00355; Znf_C2H2; 8.
DR PROSITE: PS50097; BTB; 1.
DR PROSITE: PS00028; ZINC_FINGER_C2H2_1; 4.

DR PROSITE: PS50157; ZINC_FINGER_C2H2_2; 4.
KW Transcription regulation; DNA-binding; Zinc-finger; Metal-binding;
KW Nuclear protein; Repeat.
FT DOMAIN 24 91 BTB.
FT ZN_FING 216 238 C2H2-TYPE 1 (ATYPICAL).
FT ZN_FING 448 470 C2H2-TYPE 2 (ATYPICAL).
FT ZN_FING 534 556 C2H2-TYPE 3 (ATYPICAL).
FT ZN_FING 578 600 C2H2-TYPE 4.
FT ZN_FING 606 628 C2H2-TYPE 5.
FT ZN_FING 634 656 C2H2-TYPE 6.
FT ZN_FING 662 684 C2H2-TYPE 7.
FT ZN_FING 686 709 C2H2-TYPE 8.
FT CONFLICT 643 643 N -> K (IN REF. 1; BAC26603).
SQ SEQUENCE 713 AA; 81951 MW; 7ECD75A1E9C88500 CRC64;
Query Match 13.4%; Score 59.5; DB 1; Length 713;
Best Local Similarity 36.4%; Pred. No. 40;
Matches 16; Conservative 7; Mismatches 16; Indels 5; Gaps 2;
QY 4 SSSL-VPQVTSYNGRTFLGLDKNACIGTSTCKKFKKEI 46
Db 196 SSVSKLSTPKERVSRFRGRSF-----TCDSCGFGFSCCKLLDEHV 235
RESULT 25
HMDH_SCHPO STANDARD; PRT; 1053 AA.
ID Q10283; 074425;
DT 01-NOV-1997 (Rel. 35, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE 3-hydroxy-3-methylglutaryl-coenzyme A reductase (EC 1.1.1.34) (HMG-CoA
DE reductase).
GN HMG1 OR SPCC162.09C.
OS Schizosaccharomyces pombe (Fission yeast).
OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
OC Schizosaccharomycetales; Schizosaccharomycetaceae;
OC Schizosaccharomycetes.
OX NCBI_TaxID=4896;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97051601; PubMed=8896278;
RA Lum P.Y., Edwards S., Wright R.;
RT "Molecular, functional and evolutionary characterization of the gene
RT encoding HMG-CoA reductase in the fission yeast, Schizosaccharomycetes
RT pombe";
RL Yeast 12:1107-1124(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=21848401; PubMed=11859360;
RA Wood V., Gwilliam R., Rajandream M.A., Lyne M., Lyne R., Stewart A.,
RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Oliver K., O'Neil S., Pearson D., Quail M.A., Rabinowitsch E.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Gabel C., Fuchs M., Fritz C., Holzer E., Moestl D., Hilbert H.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,

FT	CONFLICT	1149	1212	EVNLLFTVNESNSQXTIVHQCNCARKTSGNLENFVWLEQ	
FT				YKMEDLIQVYDQFTLAPSLSSAS -> STRDLPLQLHLRQC	
FT				HLQGPDKAAILEFHLTEGSGDMH (IN REF. 2).	
SQ	SEQUENCE	1212 AA;	136736 MW;	2AE1A816F3D6ACB5 CRC64;	
	Query Match	13.4%;	Score 59.5;	DB 1;	Length 1212;
	Best Local Similarity	28.3%;	Pred. No. 74;		
	Matches	17;	Conservative	9;	Mismatches 23; Indels 11; Gaps 2;
QY		18	NFGRTEFLGLDKCNACIG-----TSICKKFFKKEEIRSDNW-----LASHLGLPPDSLLSY	66	
Db		277	NSGQSWYFLGRYSCIGKVQDAFVSRQSIDKSEASDTWCSIGVLYQQNQNPMDALQAY	336	
	RESULT 27				
YM99_YEAST					
ID	YM99_YEAST	STANDARD;	PRT;	105 AA.	
AC	Q04898;				
DT	01-NOV-1997 (Rel. 35, Created)				
DT	01-NOV-1997 (Rel. 35, Last sequence update)				
DT	10-OCT-2003 (Rel. 42, Last annotation update)				
DE	Hypothetical 11.6 kDa protein in FET4-ERR1 intergenic region.				
GN	YMR321C OR YMR924.13C.				
CS	Saccharomyces cerevisiae (Baker's yeast).				
CC	Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;				
OC	Saccharomycetales; Saccharomycetaceae; Saccharomycetes.				
OX	NCBI_TaxID=4932;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN=S288C / AB972;				
RX	MEDLINE=97313268; PubMed=3169872;				
RA	Bowman S., Churcher C.M., Badcock K., Brown D., Chillingworth T.,				
RA	Connor R., Dedman K., Devlin K., Gentles S., Hamlin K., Hunt S.,				
RA	Jagels K., Lye G., Moule S., Odell C., Pearson D., Rajandream M.A.,				
RA	Rice P., Skelton J., Walsh S., Whitehead S., Barrell B.G.;				
RT	"The nucleotide sequence of Saccharomyces cerevisiae chromosome				
RT	XIII."				
RL	Nature 387:90-93(1997).				
CC	-!- SIMILARITY: TO YEAST YPL273W AND YLL062C AND TO E.COLI YAGD.				
CC					
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration				
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -				
CC	the European Bioinformatics Institute. There are no restrictions on its				
CC	use by non-profit institutions as long as its content is in no way				
CC	modified and this statement is not removed. Usage by and for commercial				
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/				
CC	or send an email to license@isb-sib.ch).				
CC					
DR	EMBL; Z54141; CAA90839.1; -.				
DR	PIR; S69879; S69879.				
DR	GermOnline; 143002; -.				
DR	SGD; S0004940; YMR321C.				
DR	InterPro; IPR003726; S_methyl_trans.				
DR	Pfam; PF02574; S-methyl_trans; 1.				
KW	Hypothetical protein.				
SQ	SEQUENCE	105 AA;	11622 MW;	4A252F6A58DA6178 CRC64;	
	Query Match	13.3%;	Score 59;	DB 1;	Length 105;
	Best Local Similarity	30.6%;	Pred. No. 5;		
	Matches	19;	Conservative	11;	Mismatches 14; Indels 13; Gaps 4;
QY		22	TFGLDKCNACIGTSICKKFFKKEEIRSDNWLAS-HLGLPPDSLLSYPAN---YSDDSKIW	77	
Db		13	SFLGIN-----CVSFN-----QSPDILESHLQALPNMALLAYPNSGEVYDTEKKIW	58	
QY		78	RP 79		
Db		59	LP 60		
	RESULT 28				
	RECA_MYCPE				
ID	RECA_MYCPE	STANDARD;	PRT;	329 AA.	

AC	Q8EVC7;				
DT	10-OCT-2003 (Rel. 42, Created)				
DT	10-OCT-2003 (Rel. 42, Last sequence update)				
DT	10-OCT-2003 (Rel. 42, Last annotation update)				
DE	ReCA protein (Recombinase A).				
GN	RECA OR MYPE6390.				
OS	Mycoplasma penetrans.				
OC	Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.				
OX	NCBI_TaxID=28227;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN=HF-2;				
RX	MEDLINE=22354719; PubMed=12466555;				
RA	Sasaki Y., Ishikawa J., Yamashita A., Oshima K., Kenri T., Furuya K.,				
RA	Yoshino C., Horino A., Shiba T., Sasaki T., Hattori M.;				
RT	"The complete genomic sequence of Mycoplasma penetrans, an				
RT	intracellular bacterial pathogen in humans.*;				
RL	Nucleic Acids Res. 30:5293-5300(2002).				
CC	-!- FUNCTION: Can catalyze the hydrolysis of ATP in the presence of				
CC	single-stranded DNA, the ATP-dependent uptake of single-stranded				
CC	DNA by duplex DNA, and the ATP-dependent hybridization of				
CC	homologous single-stranded DNAs. It interacts with lexA causing				
CC	its activation and leading to its autocatalytic cleavage (By				
CC	similarity).				
CC	-!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).				
CC	-!- SIMILARITY: Belongs to the reCA family.				
CC					
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration				
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -				
CC	the European Bioinformatics Institute. There are no restrictions on its				
CC	use by non-profit institutions as long as its content is in no way				
CC	modified and this statement is not removed. Usage by and for commercial				
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/				
CC	or send an email to license@isb-sib.ch).				
CC					
DR	EMBL; AP004172; BAC44429.1; -.				
DR	HMAP; MF 00268; -; 1.				
DR	InterPro; IPR003593; AAA_ATPase.				
DR	InterPro; IPR001553; RecA.				
DR	Pfam; PF00154; recA; 1.				
DR	PRINTS; PR00142; RECA.				
DR	ProDom; PD000229; RecA; 1.				
DR	SMART; SM00382; AAA; 1.				
DR	PROSITE; PS00321; RECA_1; 1.				
DR	PROSITE; PS0162; RECA_2; 1.				
DR	PROSITE; PS0163; RECA_3; 1.				
KW	DNA damage; DNA recombination; SOS response; ATP-binding; DNA-binding;				
KW	Complete proteome.				
FT	NP_BIND	63			
SQ	SEQUENCE	329 AA;	36754 MW;	A879BF750B797EB1 CRC64;	
	Query Match	13.3%;	Score 59;	DB 1;	Length 329;
	Best Local Similarity	27.3%;	Pred. No. 19;		
	Matches	15;	Conservative	7;	Mismatches 33; Indels 0; Gaps 0;
QY		20	GRTEFLGLDKCNACIGTSICKKFFKKEEIRSDNWLASHLGLPPDSLLSYPANYSDDS	74	
Db		68	GKTTIALQCVKECKEGSVAYDAECSIDSKYLSHLGIDPTKLLVATPEYGEQA	122	
	RESULT 29				
ID	HXCA_MOUSE	STANDARD;	PRT;	342 AA.	
AC	P31257;				
DT	01-JUL-1993 (Rel. 26, Created)				
DT	01-JUL-1993 (Rel. 26, Last sequence update)				
DT	28-FEB-2003 (Rel. 41, Last annotation update)				
DE	Homeobox protein Hox-C10 (Hox-3.6).				
GN	HOXC10 OR HOXC-10 OR HOX-3.6.				
OS	Mus musculus (Mouse).				
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.				
OX	NCBI_TaxID=10090;				

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 07:54:00 ; Search time 21.9245 Seconds
(without alignments)
1194.462 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114
Perfect score: 444
Sequence: 1 LPASSLSLVPQVRTSYNFG.....LSYPANYSDESKWRPVEIF 83

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : SPTREMBL_25:*
1: sp_archaea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriap:*
17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES				% Query		Match Length DB ID		Description	
Result No.	Score	Match	Length	DB	ID				
1	444	100.0	166	4	Q8WX00	Q8wx00 homo sapien			
2	444	100.0	182	4	Q9H7Y0	Q9h7y0 homo sapien			
3	347	78.2	435	11	Q8C3I9	Q8c3i9 mus musculu			
4	82.5	18.6	430	4	Q8NDZ4	Q8ndz4 homo sapien			
5	72.5	16.3	424	16	Q8Z1G9	Q8z1g9 salmonella			
6	71	16.0	176	16	Q9A1M3	Q9a1m3 streptococc			
7	70.5	15.9	294	2	O31243	O31243 agrobacteri			
8	70	15.8	739	5	O01260	O01260 caenorhabdi			
9	70	15.8	1044	16	Q8XIN5	Q8xin5 clostridium			
10	69.5	15.7	534	16	Q8ZC03	Q8zc03 yersinia pe			
11	69.5	15.7	534	16	Q8CLM3	Q8clm3 yersinia pe			
12	69	15.5	201	12	Q8CQU5	Q8cqu5 porcine rep			
13	69	15.5	300	4	Q96H79	Q96h79 homo sapien			
14	68.5	15.4	424	16	Q93GQ6	Q93gq6 salmonella			
15	68	15.3	295	2	Q9AH10	Q9ah10 rhodococcus			
16	68	15.3	295	2	Q8GFF8	Q8gff8 rhodococcus			

17	68	15.3	985	3	O59773	059773 schizosacch
18	67.5	15.2	390	16	Q8XB85	Q8xb85 escherichia
19	67.5	15.2	390	16	Q8FA92	Q8fa92 escherichia
20	67	15.1	1283	10	Q8LIW4	Q8liw4 oryza sativ
21	66.5	15.0	423	2	Q9ZA91	Q9za91 shigella fl
22	66	14.9	218	16	Q88AX3	Q88ax3 pseudomonas
23	66	14.9	421	4	Q8NA05	Q8na05 homo sapien
24	65.5	14.8	348	16	Q8EKB4	Q8etb4 shewanella
25	65.5	14.8	572	16	Q8Y842	Q8y842 listeria mo
26	65	14.6	387	11	Q8CDP2	Q8cdp2 mus musculu
27	64.5	14.5	424	2	Q9EUJ0	Q9euj0 salmonella
28	64.5	14.5	637	10	Q7XTQ7	Q7xtq7 oryza sativ
29	64.5	14.5	1498	16	Q8CMR9	Q8cmr9 staphylococ
30	64	14.4	446	16	Q8RHM3	Q8rhm3 fusobacteri
31	63.5	14.3	232	10	Q8SB32	Q8sb32 oryza sativ
32	63.5	14.3	352	4	Q8NEE3	Q8nee3 homo sapien
33	63.5	14.3	468	3	P87276	P87276 saccharomyc
34	63.5	14.3	470	3	P87278	P87278 saccharomyc
35	63.5	14.3	470	3	P87277	P87277 saccharomyc
36	63.5	14.3	470	3	Q9UVH5	Q9uvh5 saccharomyc
37	63.5	14.3	470	3	Q06719	Q06719 saccharomyc
38	63	14.2	398	4	Q8NAX2	Q8nax2 homo sapien
39	62.5	14.1	275	10	Q8H768	Q8h768 oryza sativ
40	62.5	14.1	1224	13	Q7T024	Q7t024 brachydanio
41	62.5	14.1	1766	13	Q8AW45	Q8aw45 brachydanio
42	62	14.0	103	12	Q91BP1	Q91bp1 porcine rep
43	62	14.0	103	12	Q91BN9	Q91bn9 porcine rep
44	62	14.0	103	12	Q91BN6	Q91bn6 porcine rep
45	62	14.0	103	12	Q91BN7	Q91bn7 porcine rep
46	62	14.0	103	12	Q91BP0	Q91bp0 porcine rep
47	62	14.0	103	12	Q91BN8	Q91bn8 porcine rep
48	62	14.0	201	12	Q8JYE8	Q8jye8 porcine rep
49	62	14.0	201	12	O55478	O55478 porcine rep
50	62	14.0	266	16	Q8EZ09	Q8ez09 leptospira
51	62	14.0	297	5	Q8MQD9	Q8mqd9 caenorhabdi
52	62	14.0	414	5	Q17994	Q17994 caenorhabdi
53	62	14.0	452	10	Q9LX41	Q9lx41 arabidopsis
54	62	14.0	459	10	Q949V7	Q949v7 arabidopsis
55	61.5	13.9	260	16	Q8D8T2	Q8d8t2 vibrio vuln
56	61.5	13.9	626	5	Q9XYR4	Q9xyr4 schistosoma
57	61.5	13.9	642	5	Q86IP2	Q86ip2 dictyosteli
58	61.5	13.9	676	16	Q8YSG6	Q8ysg6 anabaena sp
59	61.5	13.9	813	5	O76216	O76216 drosophila
60	61	13.7	126	12	Q9DKL5	Q9dkl5 spodoptera
61	61	13.7	201	12	Q8JYE6	Q8jye6 porcine rep
62	61	13.7	203	2	Q8GFF5	Q8gff5 rocardioide
63	61	13.7	240	16	Q7VAP8	Q7vap8 prochloroco
64	61	13.7	260	2	Q8GFF4	Q8gff4 cellulomona
65	61	13.7	324	13	Q9PVU1	Q9pvul brachydanio
66	61	13.7	325	3	Q08985	Q08985 saccharomyc
67	61	13.7	782	5	Q9V3K9	Q9v3k9 drosophila
68	61	13.7	1159	16	Q9FCK5	Q9fck5 streptomyce
69	61	13.7	1405	5	Q9VSA4	Q9vsa4 drosophila
70	61	13.7	1405	5	Q8MT49	Q8mt49 drosophila
71	61	13.7	1482	5	Q8I3M8	Q8i3m8 plasmodium
72	61	13.7	2674	12	Q7T6T6	Q7t6t6 ectropis ob
73	60.5	13.6	343	16	Q9RZB5	Q9rzb5 deinococcus
74	60.5	13.6	401	10	O82158	O82158 populus nig
75	60.5	13.6	401	10	Q84TL2	Q84tl2 populus tre
76	60.5	13.6	677	16	Q8YZL9	Q8yzl9 anabaena sp
77	60.5	13.6	1586	10	Q7XJX0	Q7xjx0 oryza sativ
78	60	13.5	197	16	Q8DSI7	Q8dsi7 streptococc
79	60	13.5	322	16	Q8F1L4	Q8f1l4 leptospira
80	60	13.5	342	11	Q7TMT7	Q7tmt7 mus musculu
81	60	13.5	438	5	O16753	O16753 caenorhabdi
82	60	13.5	1133	13	Q7SYB6	Q7syb6 brachydanio
83	60	13.5	1203	10	Q9SN55	Q9sn55 arabidopsis
84	60	13.5	1633	10	O81617	O81617 arabidopsis
85	60	13.5	3111	5	Q9VH10	Q9vhl0 drosophila
86	59.5	13.4	178	5	Q8WR39	Q8wr39 anopheles g
87	59.5	13.4	195	11	Q8C704	Q8c704 mus musculu
88	59.5	13.4	243	12	O55600	O55600 garlic viru
89	59.5	13.4	255	16	Q87BZ1	Q87bz1 xylella fas

90 59.5 13.4 274 10 Q82551
91 59.5 13.4 283 16 Q8EZR4
92 59.5 13.4 346 12 Q9YML4
93 59.5 13.4 417 4 Q86SW8
94 59.5 13.4 508 10 Q9C804
95 59.5 13.4 600 10 Q8RYB4
96 59.5 13.4 785 11 Q8BNG6
97 59.5 13.4 787 4 Q8TEV9
98 59.5 13.4 800 11 Q8BKB5
99 59.5 13.4 813 5 Q9WTZ1
100 59.5 13.4 900 11 Q8BY46

Q82551 oryza sativ
Q8ezr4 leptospira
Q9ym14 lymantria d
Q86sw8 homo sapien
Q9c804 arabidopsi
Q8ry84 arabidopsi
Q8bng6 mus musculu
Q8tev9 homo sapien
Q8bkb5 mus musculu
Q9vtz1 drosophila
Q8by46 mus musculu

ALIGNMENTS

RESULT 1
Q8WX00 PRELIMINARY; PRT; 166 AA.
AC Q8WX00;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE BA435K1.1 (Novel protein) (Fragment).
GN BA435K1.1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Lawlor S.;
RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AL591491; CAD13520.1; -.
FT NON TER 166
SQ SEQUENCE 166 AA; 19711 MW; E23F4A20F02E74C1 CRC64;

Query Match 100.0%; Score 444; DB 4; Length 166;
Best Local Similarity 100.0%; Pred. No. 2.9e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFEKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFEKEIRSDNWLASHLGLPP 91
QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 2
Q9H7Y0 PRELIMINARY; PRT; 182 AA.
AC Q9H7Y0;
DT 01-MAR-2001 (TrEMBLrel. 16, Created)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hypothetical protein FLJ14103.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Mammary gland;
RA Isogai T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
RA Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H.,
RA Wagatsuma M., Hosoi Y., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
RA Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.,
RA Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K.,
RA Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y.,
RA Niinomiya K., Iwayanagi T.;
RT "NEDO human cDNA sequencing project.";

RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AK024165; BAB14843.1; -.
KW Hypothetical protein.
SQ SEQUENCE 182 AA; 20643 MW; CA22BB5607329427 CRC64;
Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 3.2e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFEKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFEKEIRSDNWLASHLGLPP 91
QY 61 DSLLSYPNYSDDSKIWRPVEIF 83
Db 92 DSLLSYPNYSDDSKIWRPVEIF 114

RESULT 3
Q8C3I9 PRELIMINARY; PRT; 435 AA.
AC Q8C3I9;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hypothetical P-loop containing nucleotide triphosphate hydrolases
DE structure containing protein.
GN 4930578C19RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Heart;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
DR EMBL; AK085770; BAC39535.1; -.
DR MGD; MGI:1923155; 4930578C19RIK.
KW Hypothetical protein.
SQ SEQUENCE 435 AA; 49042 MW; 0A1B466BB04CEB1D CRC64;

Query Match 78.2%; Score 347; DB 11; Length 435;
Best Local Similarity 81.7%; Pred. No. 6.7e-34;
Matches 67; Conservative 3; Mismatches 12; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVTSYNFGRFTFLGLDKCNACIGTSICKKFEKEIRSDNWLASHLGLPP 60
Db 34 LPASLPPLVPRVRSYTMGKTFLGLDKCNACIGTSICKKFEKEIRSDNWLASHLGLPP 93
QY 61 DSLLSYPNYSDDSKIWRPVEI 82
Db 94 QDLHSAANYSDDSKIWRPVEI 115

RESULT 4
Q8NDZ4 PRELIMINARY; PRT; 430 AA.
AC Q8NDZ4;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.

RP SEQUENCE FROM N.A.
RC STRAIN=LT2 / SGSC1412 / ATCC 700720;
RX MEDLINE=21534948; PubMed=11677609;
RA McClelland M., Sanderson K.E., Spieth J., Clifton S.W., Latreille P.,
RA Courtney L., Porwollik S., Ali J., Dante M., Du F., Hou S., Layman D.,
RA Leonard S., Nguyen C., Scott K., Holmes A., Grewal N., Mulvaney E.,
RA Ryan E., Sun H., Florea L., Miller W., Stoneking T., Nhan M.,
RA Waterston R., Wilson R.K.;
RT "Complete genome sequence of Salmonella enterica serovar Typhimurium
LT2.";
RL Nature 413:852-856 (2001).
DR EMBL; AB036471; AAL23540.1; -.
DR GO; GO:0046821; C:extrachromosomal DNA; IEA.
DR GO; GO:0006281; P:DNA repair; IEA.
DR InterPro; IPR001126; UMUC-like.
DR Pfam; PF00817; IMS; 1.
DR PROSITE; PS50173; UMUC; 1.
KW Plasmid; Complete proteome.
SQ SEQUENCE 424 AA; 47700 MW; B2FE9F39C9C35652 CRC64;

Query Match 15.4%; Score 68.5; DB 16; Length 424;
Best Local Similarity 27.8%; Pred. No. 8.4;
Matches 20; Conservative 13; Mismatches 36; Indels 3; Gaps 2;

QY 6 LSSLVQVRTSYNFGRTFLGDKCNACIGTSICKKPFKEIRSDNWLASHLGLPPDLSLS 65
DB 88 LEELAPRVE-QYSIDEMFLDIRGIDSCIDFDFGRLREHVRSGTGLTIGVGMGPTKELA 146

QY 66 YPANYSDDSKIW 77
DB 147 KSAQWA--SKEW 156

RESULT 15
Q9AH10 PRELIMINARY; PRT; 295 AA.
AC Q9AH10;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Putative F420-dependent dehydrogenase.
OS Rhodococcus erythropolis.
OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Nocardiaeae; Rhodococcus.
OX NCBI_TaxID=1833;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=HL PM-1;
RX MEDLINE=21479405; PubMed=11595177;
RA Walters D.M., Russ R., Knackmuss H.J., Rouviere P.E.;
RT "High-density sampling of a bacterial operon using mRNA differential
RT display.";
RL Gene 273:305-315 (2001).
DR EMBL; AF323606; AAK38097.1; -.
DR InterPro; IPR002103; Bac_luciferase.
DR Pfam; PF00296; bac_luciferase; 1.
SQ SEQUENCE 295 AA; 32923 MW; BDADAF6ECA39D215 CRC64;

Query Match 15.3%; Score 68; DB 2; Length 295;
Best Local Similarity 40.0%; Pred. No. 6.3;
Matches 16; Conservative 7; Mismatches 13; Indels 4; Gaps 3;

QY 42 FKEEIRSDN-WLASHLGLPPDLSLLSYPNYSDDSK-IWRP 79
DB 25 FAEKIGFDSLWMTDHALPTRVETAYP--YTDDGKFLWDP 62

RESULT 16
Q8GFF8 PRELIMINARY; PRT; 295 AA.
AC Q8GFF8;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)

DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hydride transferase 1 (Fragment).
GN HT1.
OS Rhodococcus opacus (Nocardia opaca).
OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Nocardiaeae; Rhodococcus.
OX NCBI_TaxID=37919;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=RH1;
RA Heiss G.S., Knackmuss H.-J.;
RT "Highly Conserved Genes Encoding Ring Hydrogenation of Picric Acid and
RT 2,4-Dinitrophenol.";
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY027578; AAK29141.1; -.
DR GO; GO:0016740; F:transferase activity; IEA.
DR InterPro; IPR002103; Bac_luciferase.
DR Pfam; PF00296; bac_luciferase; 1.
KW Transferase.
FT NON TER 295 295
SQ SEQUENCE 295 AA; 32923 MW; BDADAF6ECA39D215 CRC64;

Query Match 15.3%; Score 68; DB 2; Length 295;
Best Local Similarity 40.0%; Pred. No. 6.3;
Matches 16; Conservative 7; Mismatches 13; Indels 4; Gaps 3;

QY 42 FKEEIRSDN-WLASHLGLPPDLSLLSYPNYSDDSK-IWRP 79
DB 25 FAEKIGFDSLWMTDHALPTRVETAYP--YTDDGKFLWDP 62

RESULT 17
O59773 PRELIMINARY; PRT; 985 AA.
AC O59773;
DT 01-AUG-1998 (TrEMBLrel. 07, Created)
DT 01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein.
GN SPCC1795.08C.
OS Schizosaccharomyces pombe (Fission yeast).
OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
OC Schizosaccharomycetales; Schizosaccharomycetaceae;
OC Schizosaccharomycetes.
OX NCBI_TaxID=4896;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=972h-;
RA Lyne M., Rajandream M.A., Barrell B.G., Oliver K., Harris D.;
RL Submitted (APR-1998) to the EMBL/GenBank/DBJ databases.
DR EMBL; AL022598; CAA18643.1; -.
DR PIR; T41135; T41135.
DR GeneDB SPombe; SPCC1795.08C; -.
DR GO; GO:0005634; C:nucleus; IEA.
DR GO; GO:0003677; F:DNA binding; IEA.
DR InterPro; IPR006562; HSA.
DR InterPro; IPR001005; Myb_DNA_binding.
DR SMART; SM00573; HSA; 1.
DR SMART; SM00717; SANT; 1.
DR PROSITE; PS50090; MYB_3; 1.
KW Hypothetical protein.
SQ SEQUENCE 985 AA; 112481 MW; BDB5D9374C83A947 CRC64;

Query Match 15.3%; Score 68; DB 3; Length 985;
Best Local Similarity 31.9%; Pred. No. 26;
Matches 22; Conservative 5; Mismatches 20; Indels 22; Gaps 2;

QY 27 DKCNACIGTSICK-----KFFKEIRS-----DNWLASHLGLPPDLSLL 64
DB 519 DKCTVCTPASLSKNKPKYMQENEHQDSHEETNEQIVSHFNLDNNNNKVLSPRSLQ 578

QY 65 YPANYSDD 73


```
Db 579 FYNVFSDD 587

RESULT 18
Q8XB85 PRELIMINARY; PRT; 390 AA.
AC Q8XB85;
DT 01-MAR-2002 (TReMBLrel. 20, Created)
DT 01-MAR-2002 (TReMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
DE Oxf, hypothetical protein.
GN YJIM OR Z5937 OR ECS5298.
OS Escherichia coli O157:H7.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
CC Enterobacteriaceae; Escherichia.
OX NCBI_TaxID=83334;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=O157:H7 / EDL933 / ATCC 700927;
RX MEDLINE=21074935; PubMed=11206551;
RA Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D.,
RA Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,
RA Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L.,
RA Grotbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamousis K.,
RA Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,
RA Welch R.A., Blattner F.R.;
RT "Genome sequence of enterohaemorrhagic Escherichia coli O157:H7."
RL Nature 409:529-533(2001).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=O157:H7 / RIMD 0509952;
RX MEDLINE=21156231; PubMed=11258796;
RA Hayashi T., Makino K., Chnishi M., Kurokawa K., Ishii K., Yokoyama K.,
RA Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka M., Tohe T.,
RA Iida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T.,
RA Kuhara S., Shiba T., Hattori M., Shinagawa H.;
RT "Complete genome sequence of enterohemorrhagic Escherichia coli
RT O157:H7 and genomic comparison with a laboratory strain K-12."
RL DNA Res. 8:11-22(2001).
DR EM3L; AE005665; AAG59520.1; -.
DR EM3L; AP002569; BAB38721.1; -.
DR PIR; B91291; B91291.
DR PIR; D86132; D86132.
KW Complete proteome.
SQ SEQUENCE 390 AA; 43599 MW; B54561646F69415B CRC64;

Query Match 15.2%; Score 67.5; DB 16; Length 390;
Best Local Similarity 24.4%; Pred. No. 10;
Matches 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;

QY 8 SLVPQVRTSYNFGRTFLGLDKC-----NACIGTSIC---KKFFKEIRSDNWLAHLGL 58
Db 83 NLCPLIKSSYGFCKT----DKCPYFYFSDLVVGTTCDGKKKMYE-----YMAE---F 128

QY 59 PPDLSLLSYPNYSDSK--IWR 78
Db 129 KPVHVMQLPNSVKDDASRALWK 150

RESULT 19
Q8FA92 PRELIMINARY; PRT; 390 AA.
AC Q8FA92;
DT 01-MAR-2003 (TReMBLrel. 23, Created)
DT 01-MAR-2003 (TReMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Hypothetical protein YJIM.
GN YJIM OR C5418.
OS Escherichia coli O6.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
CC Enterobacteriaceae; Escherichia.
OX NCBI_TaxID=217992;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=O6:HI / CFT073 / ATCC 700928;
RX MEDLINE=22388234; PubMed=12471157;
RA Welch R.A., Burland V., Plunkett G. III, Redford P., Roesch P.,
RA Rasko D., Buckles E.L., Liou S.-R., Boutin A., Hackett J., Stroud D.,
RA Mayhew G.F., Rose D.J., Zhou S., Schwartz D.C., Perna N.T.,
RA Mobley H.L.T., Donnenberg M.S., Blattner F.R.;
RT "Extensive mosaic structure revealed by the complete genome sequence
RT of uropathogenic Escherichia coli."
RL Proc. Natl. Acad. Sci. U.S.A. 99:17020-17024(2002).
DR EM3L; AE016772; AAN83838.1; -.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 390 AA; 43611 MW; C12BD2BFED7E83C8 CRC64;

Query Match 15.2%; Score 67.5; DB 16; Length 390;
Best Local Similarity 24.4%; Pred. No. 10;
Matches 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;

QY 8 SLVPQVRTSYNFGRTFLGLDKC-----NACIGTSIC---KKFFKEIRSDNWLAHLGL 58
Db 83 NLCPLIKSSYGFCKT----DKCPYFYFSDLVVGTTCDGKKKMYE-----YMAE---F 128

QY 59 PPDLSLLSYPNYSDSK--IWR 78
Db 129 KPVHVMQLPNSVKDDASRALWK 150

RESULT 20
Q8LIW4 PRELIMINARY; PRT; 1283 AA.
AC Q8LIW4;
DT 01-OCT-2002 (TReMBLrel. 22, Created)
DT 01-OCT-2002 (TReMBLrel. 22, Last sequence update)
DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
DE Putative zinc finger protein.
GN P0497A05.7.
OS Oryza sativa (japonica cultivar-group).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzeae; Oryza.
OX NCBI_TaxID=39947;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. Nipponbare;
RA Sasaki T., Matsumoto T., Yamamoto K.;
RT "Oryza sativa nipponbare (GA3) genomic DNA, chromosome 1, PAC
RT clone: P0497A05."
RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
DR EM3L; AP003380; BAB92564.1; -.
DR Gramene; Q8LIW4; -.
DR InterPro; IPR003347; TF_JmjC.
DR InterPro; IPR003349; TF_JmjN.
DR InterPro; IPR007087; ZnF_C2H2.
DR Pfam; PF02373; jmjC; 1.
DR Pfam; PF02375; jmjN; 1.
DR Pfam; PF00096; zf-C2H2; 3.
DR SMART; SM00558; JmjC; 1.
DR SMART; SM00545; JmjN; 1.
DR SMART; SM00355; ZnF_C2H2; 4.
DR PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.
DR PROSITE; PS0157; ZINC_FINGER_C2H2_2; 3.
KW Metal-binding; Zinc; Zinc-finger.
SQ SEQUENCE 1283 AA; 141875 MW; 04CFB7DB88CCDE0D CRC64;

Query Match 15.1%; Score 67; DB 10; Length 1283;
Best Local Similarity 39.0%; Pred. No. 47;
Matches 16; Conservative 4; Mismatches 21; Indels 0; Gaps 0;

QY 32 CIGTSICKKFFKEIRSDNWLAHLGLPPDSLLSYPNYSD 72
Db 408 CEGEQLVKMFQIONVIEDNELLSHLLNDGSSCIILPANAH 448
```

RESULT 21
Q9ZA91
ID Q9ZA91 PRELIMINARY; PRT; 423 AA.
AC Q9ZA91;
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE ImpB.
GN IMPB.
OS Shigella flexneri.
OG Plasmid virulence.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Shigella.
OX NCBI_TaxID=623;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SA100;
RX MEDLINE=99150279; PubMed=10024589;
RA Ruryen-Janecky L.J., Hong M., Payne S.M.;
RT "The virulence plasmid-encoded impCAB operon enhances survival and
RT induced mutagenesis in Shigella flexneri after exposure to UV
RT radiation.";
RL Infect. Immun. 67:1415-1423(1999).
DR EM3L; AF079316; AAD03593.1; -.
DR GO; GO:0046821; C:extrachromosomal DNA; IEA.
DR GO; GO:0036281; P:DNA repair; IEA.
DR InterPro; IPR001126; UMUC_like.
DR Pfam; PF03817; IMS; 1.
DR PROSITE; PS50173; UMUC; 1.
KW Plasmid.
SQ SEQUENCE 423 AA; 47624 MW; 0259CA5B1C222AF8 CRC64;

Query Match 15.0%; Score 66.5; DB 2; Length 423;
Best Local Similarity 27.8%; Pred. No. 15;
Matches 20; Conservative 12; Mismatches 37; Indels 3; Gaps 2;

QY 6 LSSLPQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLS 65
DB 88 LESLSPAVE-PYSIDEMFIDLRGINHCISPEFFGHQLREQVKSWTGLTMGVGIAPTKTLA 146

QY 66 YPANYSDDSKIW 77
DB 147 KSAQWA--TKQW 156

RESULT 22
Q98AX3
ID Q98AX3 PRELIMINARY; PRT; 218 AA.
AC Q98AX3;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Conserved hypothetical protein.
GN PSPT00260.
OS Pseudomonas syringae (pv. tomato).
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=323;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=DC3000;
RA Bueli R., Joardar V., Khouri H., Fedorova N., Tran B., Russell D.,
RA Berry K., Utterback T., Van Aken S., Feldblyum T., Gwinn M.,
RA Dodson R., DeBoy R., Durkin A., Kolonay J., Madupu R., Daugherty S.,
RA Brinkac L., Beanan M., Haft D., Selengut J., Nelson W., DavidSEN T.,
RA White O., Fraser C., Collmer A.;
RT "Complete sequence of Pseudomonas syringae.";
RL Submitted (MAR-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AE016856; AA053806.1; -.
DR TIGR; PSPT00260; -.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 218 AA; 24762 MW; 21CAC43D2730AE20 CRC64;

Query Match 14.9%; Score 66; DB 16; Length 218;
Best Local Similarity 29.1%; Pred. No. 7.8;
Matches 23; Conservative 13; Mismatches 25; Indels 18; Gaps 4;

QY 13 VRTSYNFGRTF-----LGLDKCNACIGTSICKKFFK-----EIRSDNWLASHLGL 58
DB 81 IKTSWEEGMTFARSVPDWTLEFADPGAML---YLRKFYRLLVYADRLQDRGILCERLGL 137

QY 59 PPDSSLSPANYSDDSKIW 77
DB 138 EPDSSLSRATHPLDTR-W 155

RESULT 23
Q8NA05
ID Q8NA05 PRELIMINARY; PRT; 421 AA.
AC Q8NA05;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein FLJ35981 (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Testis;
RA Suzuki O., Sasaki N., Aotsuka S., Shoji T., Ichihara T., Shiohata N.,
RA Matsumoto K., Hirano M., Sano S., Nomura R., Yoshikawa Y.,
RA Matsumura Y., Moriya S., Chiba E., Momiyama H., Onogawa S.,
RA Kaeriyama S., Satoh N., Matsunawa H., Takahashi E., Kataoka R.,
RA Kuga N., Kuroda A., Satoh I., Kamata K., Takami S., Terashima Y.,
RA Watanabe M., Sugiyama T., Irie R., Otsuki T., Sato H., Wakamatsu A.,
RA Ishii S., Yamamoto J., Isono Y., Kawai-Hio Y., Saito K., Nishikawa T.,
RA Kimura K., Yamashita H., Matsuo K., Nakamura Y., Sekine M.,
RA Kikuchi H., Kanda K., Wagatsuma M., Murakawa K., Kanehori K.,
RA Takahashi-Fujii A., Oshima A., Sugiyama A., Kawakami B., Suzuki Y.,
RA Sugano S., Nagahari K., Masuho Y., Nagai K., Isogai T.;
RT "NEDO human cDNA sequencing project.";
RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AK093300; BAC04126.1; -.
KW Hypothetical protein.
FT NON TER 421
SQ SEQUENCE 421 AA; 48338 MW; AA77BE049F6CD9FD CRC64;

Query Match 14.9%; Score 66; DB 4; Length 421;
Best Local Similarity 32.7%; Pred. No. 17;
Matches 16; Conservative 6; Mismatches 23; Indels 4; Gaps 1;

QY 12 QVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
DB 205 QEETTENIEKRLTSLDSCQACMKISCCSHDKKQWD---LLQHLQVSP 249

RESULT 24
Q8EKB4
ID Q8EKB4 PRELIMINARY; PRT; 348 AA.
AC Q8EKB4;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein.
GN S00181.
OS Shewanella oneidensis.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Alteromonadales;
OC Alteromonadaceae; Shewanella.
OX NCBI_TaxID=70863;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=MR-1;
RX MEDLINE=22297686; PubMed=12368813;
RA Heidelberg J.F., Paulsen I.T., Nelson K.E., Gaidos E.J., Nelson W.C.,

RA	Read T.D., Eisen J.A., Seshadri R., Ward N., Methe B., Clayton R.A., Meyer T., Tsapin A., Scott J., Beanan M., Brinkac L., Daugherty S., DeBoy R.T., Dodson R.J., Durkin A.S., Haft D.H., Kolonay J.F., Madupu R., Peterson J.D., Umayam I.A., White O., Wolf A.M., Vamathevan J., Weidman J., Impraim M., Lee K., Berry K., Lee C., Mueller J., Khouri H., Gill J., Utterback T.R., McDonald L.A., Feldblyum T.V., Smith H.O., Venter J.C., Nealson K.H., Fraser C.M.; "Genome sequence of the dissimilatory metal ion-reducing bacterium Shewanella oneidensis.";
RL	Nat. Biotechnol. 20:1118-1123(2002).
DR	EMBL; AE015467; AAN53268.1; -.
DR	TIGR; SOO181; -.
KW	Hypothetical protein; Complete proteome.
SQ	SEQUENCE 348 AA; 39995 MW; CDB516401B86A280 CRC64;
Query Match	14.8%; Score 65.5; DB 16; Length 348;
Best Local Similarity	33.3%; Pred. No. 16;
Matches	20; Conservative 7; Mismatches 22; Indels 11; Gaps 1;
QY	1 LPASSLSSLVPOVRT-----SYNFGRTFLGLDKONACIGTSICKKFFKEIRSD 49 : :
ED	96 LPAPNLGSLVEQVPAGFIHLSRCGSTLVSRSFAGLSKCRALSESPLLTQVLDMILSD 155 : :
RESULT 25	
QY842	PRELIMINARY; PRT; 572 AA.
ID QY842	
AC QY842;	
DT 01-MAR-2002	(TrEMBLrel. 20, Created)
DT 01-MAR-2002	(TrEMBLrel. 20, Last sequence update)
DT 01-JUN-2003	(TrEMBLrel. 24, Last annotation update)
DE	Hypothetical protein Imc0176.
GN IMC0176.	
OS	Listeria monocytogenes.
OC	Bacteria; Firmicutes; Bacillales; Listeriaceae; Listeria.
OX	NCBI_TaxID=1639;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	STRAIN=EGD-e / Serovar 1/2a;
RX	MEDLINE=21537279; PubMed=11679669;
RA	Glaser P., Frangeul L., Buchrieser C., Rusniok C., Amend A., Baquero F., Berche P., Bloecker H., Brandt P., Chakraborty T., Charbit A., Chetouani F., Couve E., de Daruvar A., Dehoux P., Domann E., Dominguez-Bernal G., Duchaud E., Durant L., Dussurget O., Entian K.-D., Fsihi H., Garcia-del Portillo F., Garrido P., Gautier L., Goebel W., Gomez-Lopez N., Hain T., Hauf J., Jackson D., Jones L.-M., Kaerst U., Kreft J., Kuhr M., Kunst F., Kurapkut G., Madueno E., Maitournam A., Mata Vicente J., Ng E., Nedjari H., Nordisiek G., Novella S., de Pablos B., Perez-Diaz J.-C., Purcell R., Remmel B., Rose M., Schlueter T., Simoes N., Tierrez A., Vazquez-Boland J.-A., Voss H., Wehländ J., Cossart P.; "Comparative genomics of Listeria species."; Science 294:849-852(2001).
RL	EMBL; AL591977; CAC99154.1; -.
DR	PTR; AD1209; ADI209.
DR	ListiList; LMO01076; -.
DR	GO; GO:0009288; C:Flagellum (sensu Bacteria); IEA.
DR	GO; GO:0004040; F:amidase activity; IEA.
DR	GO; GO:0003774; F:motor activity; IEA.
DR	GO; GO:0001539; P:ciliary/flagellar motility; IEA.
DR	GO; GO:0009253; P:peptidoglycan catabolism; IEA.
DR	InterPro; IPR002901; Amidase_4.
DR	InterPro; IPR000423; Flag_FlgJ.
DR	Pfam; PF01832; Amidase_4; 1.
DR	PRINTS; PR01002; FLGFLGJ.
DR	SMART; SM00047; LYZ2; 1.
KW	Hypothetical protein; Complete proteome.
SQ	SEQUENCE 572 AA; 64155 MW; 02167C724D7F78B1 CRC64;
Query Match	14.8%; Score 65.5; DB 16; Length 572;
Best Local Similarity	25.3%; Pred. No. 28;
Matches	24; Conservative 11; Mismatches 31; Indels 29; Gaps 5;

Search completed: June 14, 2004, 07:59:42
Job time : 22.9245 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 08:05:41 ; Search time 23 Seconds
(without alignments)
408.519 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPQLGPEAAALRPGWLALL.....DLVQDCHQSQRELKFLCMLR 182

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 389414 seqs, 51625971 residues

Word size : 0
Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	182	100.0	182	4	US-09-904-615-114
2	182	100.0	209	4	US-09-904-615-168
3	88	48.4	146	4	US-09-489-847-161
4	88	48.4	146	4	US-09-904-615-121
5	88	48.4	146	4	US-09-904-615-169
6	75	41.2	79	4	US-09-904-615-167
7	75	41.2	80	4	US-09-904-615-120
8	7	3.8	25	3	US-09-049-691-57
9	7	3.8	25	3	US-09-049-691-59
10	7	3.8	25	3	US-09-049-691-62
11	7	3.8	25	3	US-09-049-691-63
12	7	3.8	84	4	US-09-663-600A-204
13	7	3.8	85	4	US-09-716-129-63
14	7	3.8	86	4	US-09-663-600A-111
15	7	3.8	97	4	US-09-663-600A-110
16	7	3.8	182	4	US-09-663-600A-205
17	7	3.8	195	4	US-09-252-991A-21779
18	7	3.8	219	1	US-08-470-261-2
19	7	3.8	219	3	US-08-916-989B-2
20	7	3.8	219	4	US-09-432-253-2
21	7	3.8	219	4	US-09-974-800-2
22	7	3.8	219	5	PCT-US94-13187-2
23	7	3.8	311	4	US-09-252-991A-18075
24	7	3.8	344	1	US-08-400-422-4
25	7	3.8	353	1	US-08-034-650-11
26	7	3.8	353	1	US-08-449-015-11
27	7	3.8	409	4	US-09-252-991A-18707
					Sequence 114, App
					Sequence 168, App
					Sequence 161, App
					Sequence 121, App
					Sequence 169, App
					Sequence 167, App
					Sequence 120, App
					Sequence 57, Appl
					Sequence 59, Appl
					Sequence 62, Appl
					Sequence 63, Appl
					Sequence 204, App
					Sequence 63, Appl
					Sequence 111, App
					Sequence 110, App
					Sequence 205, App
					Sequence 21779, A
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 18075, A
					Sequence 4, Appli
					Sequence 11, Appl
					Sequence 11, Appl
					Sequence 18707, A

28	7	3.8	469	4	US-09-252-991A-25438	Sequence 25438, A
29	7	3.8	556	4	US-09-252-991A-22670	Sequence 22670, A
30	7	3.8	693	2	US-08-380-403A-2	Sequence 2, Appli
31	7	3.8	693	2	US-08-380-403A-5	Sequence 5, Appli
32	7	3.8	693	2	US-08-895-628-2	Sequence 2, Appli
33	7	3.8	693	2	US-08-895-628-5	Sequence 5, Appli
34	7	3.8	693	4	US-08-895-810D-2	Sequence 2, Appli
35	7	3.8	693	4	US-08-895-810D-5	Sequence 5, Appli
36	7	3.8	705	4	US-09-252-991A-28353	Sequence 28353, A
37	7	3.8	716	1	US-08-396-479B-4	Sequence 4, Appli
38	7	3.8	716	1	US-08-818-823-4	Sequence 4, Appli
39	7	3.8	716	3	US-09-037-190-38	Sequence 38, Appl
40	7	3.8	716	3	US-09-037-190-46	Sequence 46, Appl
41	7	3.8	716	3	US-09-037-192-38	Sequence 38, Appl
42	7	3.8	716	3	US-09-037-192-46	Sequence 46, Appl
43	7	3.8	716	3	US-09-037-143-38	Sequence 38, Appl
44	7	3.8	716	3	US-09-037-143-46	Sequence 46, Appl
45	7	3.8	716	3	US-09-049-691-38	Sequence 38, Appl
46	7	3.8	716	3	US-09-049-691-46	Sequence 46, Appl
47	7	3.8	716	3	US-08-260-174-38	Sequence 38, Appl
48	7	3.8	716	3	US-08-260-174-46	Sequence 46, Appl
49	7	3.8	716	4	US-09-338-128A-38	Sequence 38, Appl
50	7	3.8	716	4	US-09-338-128A-46	Sequence 46, Appl
51	7	3.8	716	4	US-09-232-346-38	Sequence 38, Appl
52	7	3.8	716	4	US-09-232-346-46	Sequence 46, Appl
53	7	3.8	716	4	US-09-037-192-38	Sequence 38, Appl
54	7	3.8	716	4	US-09-037-192-46	Sequence 46, Appl
55	7	3.8	716	5	PCT-US94-07297-37	Sequence 37, Appl
56	7	3.8	761	2	US-08-124-981A-2	Sequence 2, Appli
57	7	3.8	789	3	US-08-727-308-1	Sequence 1, Appli
58	7	3.8	1073	4	US-09-252-991A-27341	Sequence 27341, A
59	6	3.3	8	2	US-08-747-137-18	Sequence 18, Appl
60	6	3.3	10	4	US-09-498-134A-8	Sequence 8, Appli
61	6	3.3	12	4	US-09-402-401C-45	Sequence 45, Appl
62	6	3.3	15	1	US-08-030-077-8	Sequence 8, Appli
63	6	3.3	15	4	US-08-218-369-1	Sequence 1, Appli
64	6	3.3	15	4	US-09-904-599A-1	Sequence 1, Appli
65	6	3.3	15	5	PCT-US95-03742-1	Sequence 1, Appli
66	6	3.3	18	1	US-07-982-744B-6	Sequence 6, Appli
67	6	3.3	18	2	US-08-224-591-6	Sequence 6, Appli
68	6	3.3	18	2	US-08-926-789-6	Sequence 6, Appli
69	6	3.3	18	5	PCT-US93-11138-6	Sequence 6, Appli
70	6	3.3	20	4	US-09-301-593-60	Sequence 60, Appl
71	6	3.3	21	1	US-08-447-411-35	Sequence 35, Appl
72	6	3.3	21	2	US-07-982-743-17	Sequence 17, Appl
73	6	3.3	21	2	US-09-135-002-17	Sequence 17, Appl
74	6	3.3	21	3	US-09-128-155-12	Sequence 12, Appl
75	6	3.3	21	3	US-09-414-005-17	Sequence 17, Appl
76	6	3.3	21	4	US-09-645-436-17	Sequence 17, Appl
77	6	3.3	21	4	US-09-205-258-1062	Sequence 1062, Ap
78	6	3.3	24	4	US-09-523-656-32	Sequence 32, Appl
79	6	3.3	28	2	US-08-633-879C-6	Sequence 6, Appli
80	6	3.3	42	1	US-08-664-596B-15	Sequence 15, Appl
81	6	3.3	52	3	US-09-128-155-8	Sequence 8, Appli
82	6	3.3	54	2	US-08-691-814B-42	Sequence 42, Appl
83	6	3.3	54	4	US-09-621-976-5389	Sequence 5389, Ap
84	6	3.3	54	4	US-09-621-976-5390	Sequence 5390, Ap
85	6	3.3	60	2	US-08-598-873-59	Sequence 59, Appl
86	6	3.3	60	3	US-09-036-315-24	Sequence 24, Appl
87	6	3.3	60	3	US-08-605-430-59	Sequence 59, Appl
88	6	3.3	60	4	US-09-328-352-5980	Sequence 5980, Ap
89	6	3.3	63	3	US-09-128-155-4	Sequence 4, Appli
90	6	3.3	63	4	US-09-543-681A-5842	Sequence 5842, Ap
91	6	3.3	67	4	US-09-180-167A-10	Sequence 10, Appl
92	6	3.3	67	4	US-09-180-167A-11	Sequence 11, Appl
93	6	3.3	67	4	US-09-033-524B-10	Sequence 10, Appl
94	6	3.3	67	4	US-09-033-524B-11	Sequence 11, Appl
95	6	3.3	68	4	US-09-489-039A-8413	Sequence 8413, Ap
96	6	3.3	72	4	US-09-621-976-5494	Sequence 5494, Ap
97	6	3.3	76	1	US-08-264-022-1	Sequence 1, Appli
98	6	3.3	77	3	US-09-246-500B-1	Sequence 1, Appli
99	6	3.3	77	4	US-09-252-991A-26455	Sequence 26455, A
100	6	3.3	77	4	US-09-708-606-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1

US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 182; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.9e-168;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQVRTSYNFGRTFLGLDKC 60
|||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQVRTSYNFGRTFLGLDKC 60
|||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120
|||
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120
|||
QY 121 QNEISDRKICASAPKTCSEIRVLKTRFQKWLQAKRLTPDLVQDCHQORELKFLCM 180
|||
Db 121 QNEISDRKICASAPKTCSEIRVLKTRFQKWLQAKRLTPDLVQDCHQORELKFLCM 180
|||
QY 181 LR 182
|||
Db 181 LR 182

RESULT 2

US-09-904-615-168
; Sequence 168, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-168

Query Match 100.0%; Score 182; DB 4; Length 209;
Best Local Similarity 100.0%; Pred. No. 7.8e-168;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQVRTSYNFGRTFLGLDKC 60
|||
Db 28 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQVRTSYNFGRTFLGLDKC 87
|||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120
|||
Db 88 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 147
|||
QY 121 QNEISDRKICASAPKTCSEIRVLKTRFQKWLQAKRLTPDLVQDCHQORELKFLCM 180
|||
Db 148 QNEISDRKICASAPKTCSEIRVLKTRFQKWLQAKRLTPDLVQDCHQORELKFLCM 207
|||
QY 181 LR 182
|||
Db 208 LR 209

RESULT 3

US-09-489-847-161
; Sequence 161, Application US/09489847
; Patent No. 6476195
; GENERAL INFORMATION:
; APPLICANT: Rosen et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P1
; CURRENT APPLICATION NUMBER: US/09/489,847
; CURRENT FILING DATE: 2000-01-24
; EARLIER APPLICATION NUMBER: PCT/US99/17130
; EARLIER FILING DATE: 1999-07-29
; EARLIER APPLICATION NUMBER: 60/094,657
; EARLIER FILING DATE: 1998-07-30
; EARLIER APPLICATION NUMBER: 60/095,486
; EARLIER FILING DATE: 1998-08-05
; EARLIER APPLICATION NUMBER: 60/096,319
; EARLIER FILING DATE: 1998-08-12
; EARLIER APPLICATION NUMBER: 60/095,454
; EARLIER FILING DATE: 1998-08-06
; EARLIER APPLICATION NUMBER: 60/095,455
; EARLIER FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 161
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (132)

OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-489-847-161

Query Match 48.4%; Score 88; DB 4; Length 146;
Best Local Similarity 100.0%; Pred. No. 2.9e-77;
Matches 88; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLSPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLSPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLG 88
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLG 88

RESULT 4

US-09-904-615-121
; Sequence 121, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 121
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-904-615-121

Query Match 48.4%; Score 88; DB 4; Length 146;
Best Local Similarity 100.0%; Pred. No. 2.9e-77;
Matches 88; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLSPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLSPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLG 88
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLG 88

RESULT 5

US-09-904-615-169
; Sequence 169, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 169
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-904-615-169

Query Match 48.4%; Score 88; DB 4; Length 146;
Best Local Similarity 100.0%; Pred. No. 2.9e-77;
Matches 88; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLSPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLSLSPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLG 88
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLG 88

RESULT 6

US-09-904-615-167
; Sequence 167, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0

```

; SEQ ID NO 167
; LENGTH: 79
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-167

Query Match      41.2%; Score 75; DB 4; Length 79;
Best Local Similarity 100.0%; Pred. No. 5.7e-65;
Matches 75; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPQLGPEAAALRPGWLALLLWVSALSCFSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
      |||
Db      1 MEPQLGPEAAALRPGWLALLLWVSALSCFSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
      |||

QY      61 NACIGTSICKKFFKE 75
      |||
Db      61 NACIGTSICKKFFKE 75
      |||

RESULT 7
US-09-904-615-120
; Sequence 120, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: C9/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 120
; LENGTH: 80
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (80)
; OTHER INFORMATION: Xaa equals stop translation
US-09-904-615-120

Query Match      41.2%; Score 75; DB 4; Length 80;
Best Local Similarity 100.0%; Pred. No. 5.7e-65;
Matches 75; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPQLGPEAAALRPGWLALLLWVSALSCFSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
      |||
Db      1 MEPQLGPEAAALRPGWLALLLWVSALSCFSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
      |||

QY      61 NACIGTSICKKFFKE 75
      |||
Db      61 NACIGTSICKKFFKE 75
      |||

RESULT 8
US-09-049-691-57
; Sequence 57, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-049-691-57

Query Match      3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      33 PASSLS 39
      |||
Db      4 PASSLS 10
      |||

RESULT 9
US-09-049-691-59
; Sequence 59, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-049-691-57
```


;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 08/124,981
;; FILING DATE: 20-SEP-1993
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Vincent, Matthew P.
;; REGISTRATION NUMBER: 36,709
;; REFERENCE/DOCKET NUMBER: APV-332.09
;; TELEPHONE: 617-832-1000
;; TELEFAX: 617-832-7000
;; INFORMATION FOR SEQ ID NO: 59:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 25 amino acids
;; TYPE: amino acid
;; STRANDEDNESS:
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
;; US-09-049-691-59

Query Match 3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 33 PASSLSS 39
| | | | |
Db 4 PASSLSS 10

RESULT 10
US-09-049-691-62
; Sequence 62, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear

;; MOLECULE TYPE: peptide
;; US-09-049-691-62

Query Match 3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 33 PASSLSS 39
| | | | |
Db 4 PASSLSS 10

RESULT 11
US-09-049-691-63
; Sequence 63, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 63:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;; US-09-049-691-63

Query Match 3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 33 PASSLSS 39
| | | | |
Db 4 PASSLSS 10

RESULT 12
US-09-663-600A-204
; Sequence 204, Application US/09663600A
; Patent No. 6573068

```

; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, Jean-Baptiste
; APPLICANT: Duclert, Aymeric
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
; FILE REFERENCE: 31.US3.CIP
; CURRENT APPLICATION NUMBER: US/09/663,600A
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: 09/191,997
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: 60/066,677
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/069,957
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/074,121
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/081,563
; PRIOR FILING DATE: 1998-04-13
; PRIOR APPLICATION NUMBER: 60/096,116
; PRIOR FILING DATE: 1998-08-10
; PRIOR APPLICATION NUMBER: 60/099,273
; PRIOR FILING DATE: 1998-09-04
; NUMBER OF SEQ ID NOS: 229
; SOFTWARE: Patent.pm
; SEQ ID NO 204
; LENGTH: 84
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: -20...-1
US-09-663-600A-204

```

Query Match 3.8%; Score 7; DB 4; Length 84;
 Best Local Similarity 100.0%; Pred. No. 25;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Qy 15 GWLALLL 21
    |||||
Db 5 GWLALLL 11

```

```

RESULT 13
US-09-716-129-63
; Sequence 63, Application US/09716129
; Patent No. 6632920
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 36 Human Secreted Proteins
; FILE REFERENCE: P2025P1
; CURRENT APPLICATION NUMBER: US/09/716,129
; PRIOR FILING DATE: 2000-11-17
; PRIOR APPLICATION NUMBER: 60/076,053
; PRIOR FILING DATE: 1998-02-26
; PRIOR APPLICATION NUMBER: 60/076,057
; PRIOR FILING DATE: 1998-02-26
; PRIOR APPLICATION NUMBER: 60/076,052
; PRIOR FILING DATE: 1998-02-26
; PRIOR APPLICATION NUMBER: 60/076,054
; PRIOR FILING DATE: 1998-02-26
; PRIOR APPLICATION NUMBER: 60/076,051
; NUMBER OF SEQ ID NOS: 186
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 63
; LENGTH: 85
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: {85}
; OTHER INFORMATION: Xaa equals stop translation
US-09-716-129-63

```

```

Query Match 3.8%; Score 7; DB 4; Length 85;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 15 GWLALLL 21
    |||||
Db 5 GWLALLL 11

```

```

RESULT 14
US-09-663-600A-111
; Sequence 111, Application US/09663600A
; Patent No. 6573068
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, Jean-Baptiste
; APPLICANT: Duclert, Aymeric
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
; FILE REFERENCE: 31.US3.CIP
; CURRENT APPLICATION NUMBER: US/09/663,600A
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: 09/191,997
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: 60/066,677
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/069,957
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/074,121
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/081,563
; PRIOR FILING DATE: 1998-04-13
; PRIOR APPLICATION NUMBER: 60/096,116
; PRIOR FILING DATE: 1998-08-10
; PRIOR APPLICATION NUMBER: 60/099,273
; PRIOR FILING DATE: 1998-09-04
; NUMBER OF SEQ ID NOS: 229
; SOFTWARE: Patent.pm
; SEQ ID NO 111
; LENGTH: 86
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: -20...-1
US-09-663-600A-111

```

Query Match 3.8%; Score 7; DB 4; Length 86;
 Best Local Similarity 100.0%; Pred. No. 26;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Qy 15 GWLALLL 21
    |||||
Db 5 GWLALLL 11

```

```

RESULT 15
US-09-663-600A-110
; Sequence 110, Application US/09663600A
; Patent No. 6573068
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, Jean-Baptiste
; APPLICANT: Duclert, Aymeric
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
; FILE REFERENCE: 31.US3.CIP
; CURRENT APPLICATION NUMBER: US/09/663,600A
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: 09/191,997
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: 60/066,677
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/069,957

```

```

; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/074,121
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/081,563
; PRIOR FILING DATE: 1998-04-13
; PRIOR APPLICATION NUMBER: 60/096,116
; PRIOR FILING DATE: 1998-08-10
; PRIOR APPLICATION NUMBER: 60/099,273
; PRIOR FILING DATE: 1998-09-04
; NUMBER OF SEQ ID NOS: 229
; SOFTWARE: Patent.pm
; SEQ ID NO 110
; LENGTH: 97
; TYPE: prt
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: -20..-1
; NAME/KEY: UNSURE
; LOCATION: 53
; OTHER INFORMATION: xaa = any one of
US-09-6663-600A-110

```

Query Match 3.8%; Score 7; DB 4; Length 97;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 7; Conservative 0; Mismatches 0; Indels

Qy	15	GWLALL	21
D _b	5	GWLALL	11

```

RESULT 16
US-09-663-600A-205
; Sequence 205, Application US/09663600A
; Patent No. 6573068
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, Jean-Bap-tiste
; APPLICANT: Duclert, Aymeric
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
; FILE REFERENCE: 31.US3.CIP
; CURRENT APPLICATION NUMBER: US/09/663,600A
; CURRENT FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: 09/191,997
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: 60/066,677
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/069,957
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/074,121
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/081,563
; PRIOR FILING DATE: 1998-04-13
; PRIOR APPLICATION NUMBER: 60/096,116
; PRIOR FILING DATE: 1998-08-10
; PRIOR APPLICATION NUMBER: 60/099,273
; PRIOR FILING DATE: 1998-09-04
; NUMBER OF SEQ ID NOS: 229
; SOFTWARE: Patent.pm
; SEQ ID NO 205
; LENGTH: 182
; TYPE: prt
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: -20...-1
US-09-663-600A-205

```

Query Match 3.8%; Score 7; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 51;
Matches 7; Conservative 0; Mismatches 0; Indels

Qy	15	GWLALL	21
Db	5	GWLALL	11

RESULT 17

US-09-252-991A-21779

; Sequence 21779, Application US/09252991A

; Patent No. 6551795

; GENERAL INFORMATION:

; APPLICANT: Marc J. Rubenfield et al.

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

; FILE REFERENCE: 107196.136

; CURRENT APPLICATION NUMBER: US/09/252,991A

; CURRENT FILING DATE: 1999-02-18

; PRIOR APPLICATION NUMBER: US 60/074,788

; PRIOR FILING DATE: 1998-02-18

; PRIOR APPLICATION NUMBER: US 60/094,190

; PRIOR FILING DATE: 1998-07-27

; NUMBER OF SEQ ID NOS: 33142

; SEQ ID NO 21779

; LENGTH: 195

; TYPE: PRT

; ORGANISM: Pseudomonas aeruginosa

US-09-252-991A-21779

Query Match 3.8%; Score 7; DB 4; Length 195;
Best local Similarity 100.0%; Pred. No. 55;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	9	AAALRPG	15
Db	58	AAALRPG	64

RESULT 18
US-08-470-261-2
; Sequence 2, Application US/08470261
; Patent No. 5635980
; GENERAL INFORMATION:
; APPLICANT: WEI, ET AL.
; TITLE OF INVENTION: Human Mult2
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/470,261
; FILING DATE: June 6, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/13187
; FILING DATE: 15 NOV 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-372
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

LENGTH: 219 AMINO ACIDS
 TYPE: AMINO ACID
 STRANDEDNESS:
 TOPOLOGY: LINEAR
 MOLECULE TYPE: PROTEIN
 US-08-470-261-2

Query Match 3.8%; Score 7; DB 1; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
 Db 105 PEAALR 111

RESULT 19

US-08-916-989B-2
 ; Sequence 2, Application US/08916989B
 ; Patent No. 6103871

GENERAL INFORMATION:

APPLICANT: Wei, Ying-Fei
 APPLICANT: Kirkness, Ewen F.
 TITLE OF INVENTION: Human MutT2
 NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:

ADDRESSEE: Human Genome Sciences, Inc.
 STREET: 9410 Key West Avenue
 CITY: Rockville
 STATE: MD
 COUNTRY: USA
 ZIP: 20850

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/916,989B
 FILING DATE: 21-AUG-1997

CLASSIFICATION:

NAME: Wales, Michele M.
 REGISTRATION NUMBER: 43,975
 REFERENCE/DOCKET NUMBER: PF144D1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 301-309-8504
 TELEFAX: 301-309-8439

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
 LENGTH: 219 amino acids
 TYPE: amino acid
 TOPOLOGY: linear

MOLECULE TYPE:

protein

US-08-916-989B-2

Query Match 3.8%; Score 7; DB 3; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
 Db 105 PEAALR 111

RESULT 20

US-09-432-253-2
 ; Sequence 2, Application US/09432253
 ; Patent No. 6344547

GENERAL INFORMATION:

APPLICANT: Wei, Ying-Fei
 APPLICANT: Kirkness, Ewen F.
 TITLE OF INVENTION: Human MutT2

NUMBER OF SEQUENCES: 10
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Human Genome Sciences, Inc.
 STREET: 9410 Key West Avenue
 CITY: Rockville
 STATE: MD
 COUNTRY: USA
 ZIP: 20850
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/432,253
 FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/916,989
 FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Wales, Michele M.
 REGISTRATION NUMBER: 43,975
 REFERENCE/DOCKET NUMBER: PF144D1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 301-309-8504
 TELEFAX: 301-309-8439

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
 LENGTH: 219 amino acids
 TYPE: amino acid
 TOPOLOGY: linear

MOLECULE TYPE:

protein

US-09-432-253-2

Query Match 3.8%; Score 7; DB 4; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
 Db 105 PEAALR 111

RESULT 21

US-09-974-800-2
 ; Sequence 2, Application US/09974800
 ; Patent No. 6552174

GENERAL INFORMATION:

APPLICANT: Wei et al.
 TITLE OF INVENTION: Human MutT2
 FILE REFERENCE: PF144D3
 CURRENT APPLICATION NUMBER: US/09/974,800
 CURRENT FILING DATE: 2001-10-12

PRIOR APPLICATION NUMBER:

US 09/432,253

PRIOR FILING DATE:

1999-11-02

PRIOR APPLICATION NUMBER:

US 08/916,989

PRIOR FILING DATE:

1997-08-21

PRIOR APPLICATION NUMBER:

US 08/470,261

PRIOR FILING DATE:

1995-06-06

PRIOR APPLICATION NUMBER:

PCT/US94/13184

PRIOR FILING DATE:

1994-11-15

NUMBER OF SEQ ID NOS:

10

SOFTWARE:

PatentIn version 3.1

SEQ ID NO 2

LENGTH:

219

TYPE:

PRT

ORGANISM:

Homo sapiens

US-09-974-800-2

Query Match 3.8%; Score 7; DB 4; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
Db 105 PEAALR 111

RESULT 22
PCT-US94-13187-2
; Sequence 2, Application PC/TJS9413187
; GENERAL INFORMATION:
; APPLICANT: WEI, ET AL.
; TITLE OF INVENTION: Human MutT2
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSEE: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/13187
; FILING DATE: Submitted herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-245
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 219 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
PCT-US94-13187-2

Query Match 3.8%; Score 7; DB 5; Length 219;
Best Local Similarity 100.0%; Pred. No. 61;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
Db 105 PEAALR 111

RESULT 23
US-09-252-991A-18075
; Sequence 18075, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27

; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 18075
; LENGTH: 311
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-18075

Query Match 3.8%; Score 7; DB 4; Length 311;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 AAALRPG 15
Db 108 AAALRPG 114

RESULT 24
US-08-400-422-4
; Sequence 4, Application US/08400422
; Patent No. 5681715
; GENERAL INFORMATION:
; APPLICANT: Jorgensen, Steen Troels
; APPLICANT: Diderichsen, Boerge Krag
; APPLICANT: Buckley, Catherine M.
; APPLICANT: Hobson, Audrey
; APPLICANT: McConnell, David J.
; TITLE OF INVENTION: A process for the preparation of an active
; TITLE OF INVENTION: lipase
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 56817150 No. 5681715disk of No. 5681715th America, Inc.
; STREET: 405 Lexington Avenue, 62nd floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10174-6201
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/400,422
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/038,763
; FILING DATE: 25-MAR-1993
; APPLICATION NUMBER: PCT/DK91/00402
; FILING DATE: 20-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/DK92/00391
; FILING DATE: 18-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Lambiris, Elias J.
; REGISTRATION NUMBER: 33,728
; REFERENCE/DOCKET NUMBER: 3663.200-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212 867 0123
; TELEFAX: 212 867 0298
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 344 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Pseudomonas cepacia
; STRAIN: DSM 3401

US-08-400-422-4

Query Match 3.8%; Score 7; DB 1; Length 344;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 25

US-08-034-650-11
; Sequence 11, Application US/08034650
; Patent No. 5641671
; GENERAL INFORMATION:
; APPLICANT: BOS, Jannetje W.
; APPLICANT: FRENKEN, Leon G.
; APPLICANT: VERRIPS, Cornelis T.
; APPLICANT: VISSER, Christiaan
; TITLE OF INVENTION: PRODUCTION OF ACTIVE PSEUDOMONAS GLUMAE
; TITLE OF INVENTION: LIPASE IN HOMOLOGOUS OR HETEROLOGOUS HOSTS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
; STREET: 1615 L. Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20036-5601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/034,650
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION NUMBER: US 07/727,235
; FILING DATE: 03-JUL-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Kokulis, Paul N.
; REGISTRATION NUMBER: 16,773
; REFERENCE/DOCKET NUMBER: PNK/5970/91731
; TELEPHONE: (202) 861-3000
; TELEFAX: (202) 822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 353 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-034-650-11

Query Match 3.8%; Score 7; DB 1; Length 353;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 281 LGPEAAA 287

RESULT 26

US-08-449-015-11
; Sequence 11, Application US/08449015
; Patent No. 5804409
; GENERAL INFORMATION:
; APPLICANT: BOS, Jannetje W.

; APPLICANT: FRENKEN, Leon G.
; APPLICANT: VERRIPS, Cornelis T.
; APPLICANT: VISSER, Christiaan
; TITLE OF INVENTION: PRODUCTION OF ACTIVE PSEUDOMONAS GLUMAE
; TITLE OF INVENTION: LIPASE IN HOMOLOGOUS OR HETEROLOGOUS HOSTS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
; STREET: 1615 L. Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20036-5601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/449,015
; FILING DATE: 24-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION NUMBER: US 07/727,235
; FILING DATE: 03-JUL-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Kokulis, Paul N.
; REGISTRATION NUMBER: 16,773
; REFERENCE/DOCKET NUMBER: PNK/5970/91731
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 861-3000
; TELEFAX: (202) 822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 353 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-449-015-11

Query Match 3.8%; Score 7; DB 1; Length 353;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 281 LGPEAAA 287

RESULT 27

US-09-252-991A-18707
; Sequence 18707, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09-02-18
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 18707
; LENGTH: 409
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-18707

Query Match

3.8%; Score 7; DB 4; Length 409;

Best Local Similarity 100.0%; Pred. No. 1.1e+02; Indels 0; Gaps 0;
Matches 7; Conservative 0; Mismatches 0;
QY 13 RRGWLAL 19
Db 87 RRGWLAL 93
RESULT 28
US-09-252-991A-25438
; Sequence 25438, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 25438
; LENGTH: 469
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-25438
Query Match 3.8%; Score 7; DB 4; Length 469;
Best Local Similarity 100.0%; Pred. No. 1.2e+02; Indels 0; Gaps 0;
Matches 7; Conservative 0; Mismatches 0;
QY 9 AAALRPG 15
Db 54 AAALRPG 60
RESULT 29
US-09-252-991A-22670
; Sequence 22670, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22670
; LENGTH: 556
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-22670
Query Match 3.8%; Score 7; DB 4; Length 556;
Best Local Similarity 100.0%; Pred. No. 1.4e+02; Indels 0; Gaps 0;
Matches 7; Conservative 0; Mismatches 0;
QY 11 ALRPGWL 17
Db 418 ALRPGWL 424
RESULT 30
US-08-380-403A-2
; Sequence 2, Application US/08380403A

Patent No. 5831024
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; APPLICANT: HATTORI, Masakazu
; APPLICANT: HIROSHI, Kubota
; APPLICANT: MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/380,403A
; FILING DATE: 30-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-380-403A-2
Query Match 3.8%; Score 7; DB 2; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02; Indels 0; Gaps 0;
Matches 7; Conservative 0; Mismatches 0;
QY 5 LGPEAAA 11
Db 390 LGPEAAA 396
RESULT 31
US-08-380-403A-5
; Sequence 5, Application US/08380403A
; Patent No. 5831024
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; APPLICANT: HATTORI, Masakazu
; APPLICANT: HIROSHI, Kubota
; APPLICANT: MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington

us-10-054-988-114.rai

Mon Jun 14 08:48:10 2004

```

; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/380,403A
; FILING DATE: 30-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-380-403A-5

Query Match 3.8%; Score 7; DB 2; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
Db 390 LGPEAAA 396

; RESULT 32
; US-08-895-628-2
; Sequence 2, Application US/08895628
; Patent No. 5998585
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; APPLICANT: HATTORI, Masakazu
; APPLICANT: HIROSHI, Kubota
; APPLICANT: MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/895,628
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/380,403
; FILING DATE: 30-JAN-1995
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE:

; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/895,628
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/380,403
; FILING DATE: 30-JAN-1995
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE:

; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/380,403A
; FILING DATE: 30-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-380-403A-5

Query Match 3.8%; Score 7; DB 2; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
Db 390 LGPEAAA 396

; RESULT 33
; US-08-895-628-5
; Sequence 5, Application US/08895628
; Patent No. 5998585
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; APPLICANT: HATTORI, Masakazu
; APPLICANT: HIROSHI, Kubota
; APPLICANT: MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/895,628
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/380,403
; FILING DATE: 30-JAN-1995
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE:

```

```

; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-895-628-5

Query Match      3.8%; Score 7; DB 2; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      5 LGPEAAA 11
      |||||
Db      390 LGPEAAA 396

RESULT 34
US-08-895-810D-2
; Sequence 2, Application US/08895810D
; Patent No. 6406886
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; HATTORI, Masakazu
; HIROSHI, Kubota
; MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/895,810D
; FILING DATE: 17-Jul-1997
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/380,403
; FILING DATE: 30-JAN-1995
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; APPLICATION NUMBER: JP 6-139513
; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids

```

```

; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-08-895-810D-2

Query Match      3.8%; Score 7; DB 4; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      5 LGPEAAA 11
      |||||
Db      390 LGPEAAA 396

RESULT 35
US-08-895-810D-5
; Sequence 5, Application US/08895810D
; Patent No. 6406886
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; HATTORI, Masakazu
; HIROSHI, Kubota
; MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/895,810D
; FILING DATE: 17-Jul-1997
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/380,403
; FILING DATE: 30-JAN-1995
; APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; APPLICATION NUMBER: JP 6-139513
; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-08-895-810D-5

Query Match      3.8%; Score 7; DB 4; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      5 LGPEAAA 11

```



```
Db          390 LSPAAAA 396
|||||
RESULT 36
US-09-252-991A-28353
; Sequence 28353, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/03/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 28353
; LENGTH: 705
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-28353

Query Match          3.8%; Score 7; DB 4; Length 705;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          7 PEAALR 13
|||||
Db          375 PEAALR 381

RESULT 37
US-08-396-479B-4
; Sequence 4, Application US/08396479B
; Patent No. 5612455
; GENERAL INFORMATION:
; APPLICANT: HOEY, Timothy
; TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/396,479B
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A
; REGISTRATION NUMBER: 36,627
; REFERENCE/DOCKET NUMBER: A-59450-1/RAO
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 494-8700
; TELEFAX: (415) 494-8771
; TELEX: 210 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
```

```
US-08-396-479B-4
Query Match          3.8%; Score 7; DB 1; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          33 PASSLSS 39
|||||
Db          173 PASSLSS 179

RESULT 38
US-08-818-823-4
; Sequence 4, Application US/08818823
; Patent No. 5708158
; GENERAL INFORMATION:
; APPLICANT: HOEY, Timothy
; TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/818,823
; FILING DATE: 14-MAR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/396,479
; FILING DATE: 02-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A
; REGISTRATION NUMBER: 36,627
; REFERENCE/DOCKET NUMBER: A-59450-1/RAO
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 494-8700
; TELEFAX: (415) 494-8771
; TELEX: 210 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-818-823-4

Query Match          3.8%; Score 7; DB 1; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          33 PASSLSS 39
|||||
Db          173 PASSLSS 179

RESULT 39
US-09-037-190-38
; Sequence 38, Application US/09037190
; Patent No. 6096515
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096515throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
```

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,190
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.03
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-037-190-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 40
US-09-037-190-46
; Sequence 46, Application US/09037190
; Patent No. 6096515
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096515throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,190
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.03
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-037-190-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 41
US-09-037-192-38
; Sequence 38, Application US/09037192
; Patent No. 6096860
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096860throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,192
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.04
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid

STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-037-192-38
Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 42
US-09-037-192-46
Sequence 46, Application US/09037192
Patent No. 6096860
GENERAL INFORMATION:
APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6096860throp, Jeffrey P.
APPLICANT: Ho, Steffan M.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ELIOT LLP
STREET: One Post Office Square
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109-2170
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DCS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/037,192
FILING DATE: 09-MAR-1998
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/260,174
FILING DATE: 13-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/124,981
FILING DATE: 20-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: APV-332.04
TELEPHONE: 617-832-1000
TELEFAX: 617-832-7000
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 716 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-037-192-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 33 PASSLSS 39
Db 173 PASSLSS 179
RESULT 43
US-09-037-143-38
Sequence 38, Application US/09037143A

Patent No. 6150099
GENERAL INFORMATION:
APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6150099throp, Jeffrey P.
APPLICANT: Ho, Steffan N.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
FILE REFERENCE: APV-332.05
CURRENT APPLICATION NUMBER: US/09/037,143A
CURRENT FILING DATE: 1998-03-09
EARLIER APPLICATION NUMBER:
EARLIER FILING DATE:
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 38
LENGTH: 716
TYPE: PRT
ORGANISM: human
US-09-037-143-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 44
US-09-037-143-46
Sequence 46, Application US/09037143A
Patent No. 6150099
GENERAL INFORMATION:
APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6150099throp, Jeffrey P.
APPLICANT: Ho, Steffan N.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
FILE REFERENCE: APV-332.05
CURRENT APPLICATION NUMBER: US/09/037,143A
CURRENT FILING DATE: 1998-03-09
EARLIER APPLICATION NUMBER:
EARLIER FILING DATE:
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 46
LENGTH: 716
TYPE: PRT
ORGANISM: human
US-09-037-143-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 45
US-09-049-691-38
Sequence 38, Application US/09049691
Patent No. 6171781
GENERAL INFORMATION:
APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6171781throp, Jeffrey P.
APPLICANT: Ho, Steffan M.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ELIOT LLP
STREET: One Post Office Square
CITY: Boston


```
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-049-691-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 46
US-09-049-691-46
; Sequence 46, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
```

```
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-049-691-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 47
US-08-260-174-38
; Sequence 38, Application US/08260174C
; Patent No. 6197925
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6197925throp, Jeffrey P.
; APPLICANT: Ho, Steffan N.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-332.02
; CURRENT APPLICATION NUMBER: US/08/260,174C
; CURRENT FILING DATE: 1994-06-13
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 716
; TYPE: PRT
; ORGANISM: human
US-08-260-174-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 48
US-08-260-174-46
; Sequence 46, Application US/08260174C
; Patent No. 6197925
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6197925throp, Jeffrey P.
; APPLICANT: Ho, Steffan N.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-332.02
; CURRENT APPLICATION NUMBER: US/08/260,174C
; CURRENT FILING DATE: 1994-06-13
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
```

; SEQ ID NO 46
; LENGTH: 716
; TYPE: PRT
; ORGANISM: human
US-08-260-174-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred.No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 49

US-09-338-128A-38
; Sequence 38, Application US/09338128A
; Patent No. 6312899
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6312899throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-33211
; CURRENT APPLICATION NUMBER: US/09/338,128A
; CURRENT FILING DATE: 1999-06-22
; PRIOR APPLICATION NUMBER: 08/260,174
; PRIOR FILING DATE: 1994-06-13
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 716
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-338-128A-38

Query Match 3.8%; Score 7; DB 4; Length 716;
Best Local Similarity 100.0%; Pred.No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 50

US-09-338-128A-46
; Sequence 46, Application US/09338128A
; Patent No. 6312899
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6312899throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-33211
; CURRENT APPLICATION NUMBER: US/09/338,128A
; CURRENT FILING DATE: 1999-06-22
; PRIOR APPLICATION NUMBER: 08/260,174
; PRIOR FILING DATE: 1994-06-13
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 46
; LENGTH: 716
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-338-128A-46

Query Match 3.8%; Score 7; DB 4; Length 716;
Best Local Similarity 100.0%; Pred.No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 33 PASSLSS 39

Db 173 PASSLSS 179

Search completed: June 14, 2004, 08:09:22
Job time : 24 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 08:06:52 ; Search time 43 Seconds
(without alignments)
1192.422 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPQLGPEAAALRPGWLALL.....DLVQDCHQCORELFLCMLR 182

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 1158786 seqs, 281726120 residues

Word size : 0
Total number of hits satisfying chosen parameters: 1158786

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : Published Applications AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	182	100.0	182	9	US-09-739-254-114
2	182	100.0	182	9	US-09-904-615-114
3	182	100.0	182	12	US-10-211-462-217
4	182	100.0	182	14	US-10-054-988-114
5	182	100.0	182	14	US-10-177-293-153
6	182	100.0	182	14	US-10-055-098-114
7	182	100.0	209	9	US-09-739-254-168
8	182	100.0	209	9	US-09-904-615-168
9	182	100.0	209	14	US-10-054-988-168
10	182	100.0	209	14	US-10-055-098-168
11	127	69.8	182	9	US-09-965-528-10
12	127	69.8	182	12	US-10-147-493-172
13	127	69.8	182	12	US-10-145-127-172
14	127	69.8	182	12	US-10-160-503-172
15	127	69.8	182	12	US-10-143-118-172
					Sequence 114, App
					Sequence 114, App
					Sequence 217, App
					Sequence 114, App
					Sequence 150, App
					Sequence 114, App
					Sequence 168, App
					Sequence 168, App
					Sequence 168, App
					Sequence 168, App
					Sequence 10, Appl
					Sequence 172, App
					Sequence 172, App
					Sequence 172, App
					Sequence 172, App

16	127	69.8	182	12	US-10-144-993-172	Sequence 172, App
17	127	69.8	182	12	US-10-158-787-172	Sequence 172, App
18	127	69.8	182	12	US-09-969-984-10	Sequence 10, Appl
19	127	69.8	182	12	US-10-140-024-172	Sequence 172, App
20	127	69.8	182	12	US-10-140-808-172	Sequence 172, App
21	127	69.8	182	12	US-10-152-405-172	Sequence 172, App
22	127	69.8	182	12	US-10-127-852A-172	Sequence 172, App
23	127	69.8	182	12	US-10-127-900A-172	Sequence 172, App
24	127	69.8	182	12	US-10-128-685A-172	Sequence 172, App
25	127	69.8	182	12	US-10-131-820A-172	Sequence 172, App
26	127	69.8	182	12	US-10-142-886-172	Sequence 172, App
27	127	69.8	182	12	US-10-146-728-172	Sequence 172, App
28	127	69.8	182	12	US-10-146-786-172	Sequence 172, App
29	127	69.8	182	12	US-10-147-499-172	Sequence 172, App
30	127	69.8	182	12	US-10-157-798-172	Sequence 172, App
31	127	69.8	182	14	US-10-028-072-172	Sequence 172, App
32	127	69.8	182	14	US-10-121-049-172	Sequence 172, App
33	127	69.8	182	14	US-10-123-904-172	Sequence 172, App
34	127	69.8	182	14	US-10-140-470-172	Sequence 172, App
35	127	69.8	182	14	US-10-175-746-172	Sequence 172, App
36	127	69.8	182	14	US-10-176-918-172	Sequence 172, App
37	127	69.8	182	14	US-10-176-921-172	Sequence 172, App
38	127	69.8	182	14	US-10-137-865-172	Sequence 172, App
39	127	69.8	182	14	US-10-140-474-172	Sequence 172, App
40	127	69.8	182	14	US-10-142-431-172	Sequence 172, App
41	127	69.8	182	14	US-10-143-114-172	Sequence 172, App
42	127	69.8	182	14	US-10-140-002-172	Sequence 172, App
43	127	69.8	182	14	US-10-142-419-172	Sequence 172, App
44	127	69.8	182	14	US-10-123-262-172	Sequence 172, App
45	127	69.8	182	14	US-10-142-423-172	Sequence 172, App
46	127	69.8	182	14	US-10-121-050-172	Sequence 172, App
47	127	69.8	182	14	US-10-141-755-172	Sequence 172, App
48	127	69.8	182	14	US-10-143-032-172	Sequence 172, App
49	127	69.8	182	14	US-10-123-108-172	Sequence 172, App
50	127	69.8	182	14	US-10-123-236-172	Sequence 172, App
51	127	69.8	182	14	US-10-123-261-172	Sequence 172, App
52	127	69.8	182	14	US-10-140-921-172	Sequence 172, App
53	127	69.8	182	14	US-10-140-928-172	Sequence 172, App
54	127	69.8	182	14	US-10-121-045-172	Sequence 172, App
55	127	69.8	182	14	US-10-123-292-172	Sequence 172, App
56	127	69.8	182	14	US-10-123-903-172	Sequence 172, App
57	127	69.8	182	14	US-10-124-819-172	Sequence 172, App
58	127	69.8	182	14	US-10-124-822-172	Sequence 172, App
59	127	69.8	182	14	US-10-140-925-172	Sequence 172, App
60	127	69.8	182	14	US-10-160-498-172	Sequence 172, App
61	127	69.8	182	14	US-10-124-424-172	Sequence 172, App
62	127	69.8	182	14	US-10-127-825A-172	Sequence 172, App
63	127	69.8	182	14	US-10-127-829A-172	Sequence 172, App
64	127	69.8	182	14	US-10-127-835A-172	Sequence 172, App
65	127	69.8	182	14	US-10-127-839A-172	Sequence 172, App
66	127	69.8	182	14	US-10-127-901A-172	Sequence 172, App
67	127	69.8	182	14	US-10-128-693A-172	Sequence 172, App
68	127	69.8	182	14	US-10-131-813A-172	Sequence 172, App
69	127	69.8	182	14	US-10-131-818A-172	Sequence 172, App
70	127	69.8	182	14	US-10-131-823A-172	Sequence 172, App
71	127	69.8	182	14	US-10-131-824A-172	Sequence 172, App
72	127	69.8	182	14	US-10-131-830A-172	Sequence 172, App
73	127	69.8	182	14	US-10-131-837A-172	Sequence 172, App
74	127	69.8	182	14	US-10-137-872A-172	Sequence 172, App
75	127	69.8	182	14	US-10-147-500-172	Sequence 172, App
76	127	69.8	182	14	US-10-147-502-172	Sequence 172, App
77	127	69.8	182	14	US-10-147-515-172	Sequence 172, App
78	127	69.8	182	14	US-10-147-517-172	Sequence 172, App
79	127	69.8	182	14	US-10-147-526-172	Sequence 172, App
80	127	69.8	182	14	US-10-147-527-172	Sequence 172, App
81	127	69.8	182	14	US-10-121-041-172	Sequence 172, App
82	127	69.8	182	14	US-10-121-043-172	Sequence 172, App
83	127	69.8	182	14	US-10-121-047-172	Sequence 172, App
84	127	69.8	182	14	US-10-123-215-172	Sequence 172, App
85	127	69.8	182	14	US-10-123-902-172	Sequence 172, App
86	127	69.8	182	14	US-10-123-908-172	Sequence 172, App
87	127	69.8	182	14	US-10-123-909-172	Sequence 172, App
88	127	69.8	182	14	US-10-123-910-172	Sequence 172, App

89 127 69.8 182 14 US-10-124-813-172 Sequence 172, App
90 127 69.8 182 14 US-10-124-817-172 Sequence 172, App
91 127 69.8 182 14 US-10-125-922-172 Sequence 172, App
92 127 69.8 182 14 US-10-125-924-172 Sequence 172, App
93 127 69.8 182 14 US-10-140-860-172 Sequence 172, App
94 127 69.8 182 14 US-10-142-417-172 Sequence 172, App
95 127 69.8 182 14 US-10-147-519-172 Sequence 172, App
96 127 69.8 182 14 US-10-157-782-172 Sequence 172, App
97 127 69.8 182 14 US-10-152-395-172 Sequence 172, App
98 127 69.8 182 14 US-10-125-926A-172 Sequence 172, App
99 127 69.8 182 14 US-10-125-930A-172 Sequence 172, App
100 127 69.8 182 14 US-10-127-831A-172 Sequence 172, App

ALIGNMENTS

RESULT 1
US-09-739-254-114
; Sequence 114, Application US/09739254
; Patent No. US20010021700A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/739,254
; CURRENT FILING DATE: 2000-12-19
; EARLIER APPLICATION NUMBER: 09/511,554
; EARLIER FILING DATE: 2000-02-23
; EARLIER APPLICATION NUMBER: PCT/US99/19330
; EARLIER FILING DATE: 1999-08-24
; EARLIER APPLICATION NUMBER: 60/097,917
; EARLIER FILING DATE: 1998-08-25
; EARLIER APPLICATION NUMBER: 60/098,634
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-739-254-114

Query Match 100.0%; Score 182; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSSLVPPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSSLVPPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKFLCM 180
Db 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKFLCM 180
QY 181 LR 182
Db 181 LR 182

RESULT 2
US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. US20020026040A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615

; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 182; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSSLVPPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSSLVPPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKFLCM 180
Db 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKFLCM 180
QY 181 LR 182
Db 181 LR 182

RESULT 3
US-10-211-462-217
; Sequence 217, Application US/10211462
; Publication No. US20040033495A1
; GENERAL INFORMATION:
; APPLICANT: Murray, Richard
; APPLICANT: Glynn, Richard
; APPLICANT: Watson, Susan R.
; APPLICANT: Aziz, Natasha
; APPLICANT: Eos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis, Compositions and
; TITLE OF INVENTION: Methods of Screening for Angiogenesis Modulators
; FILE REFERENCE: 018501-006200US
; CURRENT APPLICATION NUMBER: US/10/211,462
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US 09/784,356
; PRIOR FILING DATE: 2001-02-14
; PRIOR APPLICATION NUMBER: US 09/791,390
; PRIOR FILING DATE: 2001-02-22
; PRIOR APPLICATION NUMBER: US 60/310,025
; PRIOR FILING DATE: 2001-08-03
; PRIOR APPLICATION NUMBER: US 60/334,244
; PRIOR FILING DATE: 2001-11-29
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 217
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-211-462-217

Query Match 100.0%; Score 182; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPSSSLVPPQVRTSYNFGRTFLGLDKC 60

Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGQRELKFLCM 180
Db 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGQRELKFLCM 180
QY 181 LR 182
Db 181 LR 182

RESULT 4

US-10-054-988-114
; Sequence 114, Application US/10054988
; Publication No. US20030087341A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/10/054,988
; CURRENT FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: 09/904,615
; PRIOR FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-054-988-114

Query Match 100.0%; Score 182; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGQRELKFLCM 180
Db 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGQRELKFLCM 180
QY 181 LR 182
Db 181 LR 182

RESULT 5

US-10-177-293-150
; Sequence 150, Application US/10177293
; Publication No. US20030124128A1
; GENERAL INFORMATION:
; APPLICANT: Lillie, James
; APPLICANT: Glatt, Karen
; APPLICANT: Zhao, Xumei
; APPLICANT: Gannavarpu, Manjula
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Mertens, Maureen

; APPLICANT: Myer, Vic
; APPLICANT: Wang, Youzhen
; APPLICANT: Xu, Yongyao
; APPLICANT: Hoersch, Sebastian
; APPLICANT: Monahan, John
; APPLICANT: Meyers, Rachel E.
; APPLICANT: Bast Jr., Robert C.
; APPLICANT: Hortobagyi, Gabriel N.
; APPLICANT: Pusztai, Lajos
; APPLICANT: Meric, Funda
; APPLICANT: Sahin, Aysegul
; APPLICANT: Mills, Gordon B.
; TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
; TITLE OF INVENTION: PREVENTION, AND THERAPY OF BREAST CANCER
; FILE REFERENCE: MRI-038
; CURRENT APPLICATION NUMBER: US/10/177,293
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,887
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/301,572
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: US 60/306,501
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: US 60/325,002
; PRIOR FILING DATE: 2001-09-25
; PRIOR APPLICATION NUMBER: US 60/362,585
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/xxx,xxx
; PRIOR FILING DATE: 2002-05-14
; NUMBER OF SEQ ID NOS: 506
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-177-293-150

Query Match 100.0%; Score 182; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGQRELKFLCM 180
Db 121 ONEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGQRELKFLCM 180
QY 181 LR 182
Db 181 LR 182

RESULT 6

US-10-055-098-114
; Sequence 114, Application US/10055098
; Publication No. US20030139954A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/10/055,098
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 2000-02-23
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-08-24
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1999-08-24
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/097,917

;; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-25
;; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/098,634
;; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-31
;; NUMBER OF SEQ ID NOS: 170
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 114
;; LENGTH: 182
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-055-098-114

Query Match 100.0%; Score 182; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 1 YEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIWRPVEIFRLVSKY 120
Db |||||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIWRPVEIFRLVSKY 120
Db |||||
QY 121 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGORELKFLCM 180
Db |||||
QY 121 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGORELKFLCM 180
Db |||||
QY 181 LR 182
Db 181 LR 182

RESULT 7

US-09-739-254-168
; Sequence 168, Application US/09739254
; Patent No. US20010021700A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/739,254
; EARLIER FILING DATE: 2000-12-19
; EARLIER APPLICATION NUMBER: 09/511,554
; EARLIER FILING DATE: 2000-02-23
; EARLIER APPLICATION NUMBER: PCT/JS99/19330
; EARLIER FILING DATE: 1999-08-24
; EARLIER APPLICATION NUMBER: 60/097,917
; EARLIER FILING DATE: 1998-08-25
; EARLIER APPLICATION NUMBER: 60/098,634
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-739-254-168

Query Match 100.0%; Score 182; DB 9; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 28 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 87
Db |||||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIWRPVEIFRLVSKY 120
Db |||||
QY 88 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIWRPVEIFRLVSKY 147
Db |||||
QY 121 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGORELKFLCM 180
Db |||||
QY 148 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGORELKFLCM 207
Db |||||

QY 181 LR 182
Db ||
208 LR 209

RESULT 8

US-09-904-615-168
; Sequence 168, Application US/09904615
; Patent No. US20020026040A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-168

Query Match 100.0%; Score 182; DB 9; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db |||||
QY 28 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 87
Db |||||
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIWRPVEIFRLVSKY 120
Db |||||
QY 88 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIWRPVEIFRLVSKY 147
Db |||||
QY 121 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGORELKFLCM 180
Db |||||
QY 148 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLOAKRLTPDLVQDCHQGORELKFLCM 207
Db |||||
QY 181 LR 182
Db ||
208 LR 209

RESULT 9

US-10-054-988-168
; Sequence 168, Application US/10054988
; Publication No. US20030087341A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/10/054,988
; CURRENT FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: 09/904,615
; PRIOR FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209


```

; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-054-988-168

Query Match      100.0%; Score 182; DB 14; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 28 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 87
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLYPANYSDDSKIWPRVPEIFRLVSKY 120
Db 88 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLYPANYSDDSKIWPRVPEIFRLVSKY 147
QY 121 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQ3QRELKFLCM 180
Db 148 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQ3QRELKFLCM 207
QY 181 LR 182
Db 208 LR 209

RESULT 10
US-10-055-098-168
; Sequence 168, Application US/10055098
; Publication No. US20030139954A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032P1
; CURRENT APPLICATION NUMBER: US/10/055,098
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: EARLIER FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US99/19330
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-08-24
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-055-098-168

Query Match      100.0%; Score 182; DB 14; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 28 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 87
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLYPANYSDDSKIWPRVPEIFRLVSKY 120
Db 88 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLYPANYSDDSKIWPRVPEIFRLVSKY 147
QY 121 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQ3QRELKFLCM 180
Db 148 QNEISDRKICASASAPKTCISIERVLRKTERFQKWLQAKRLTPDLVQDCHQ3QRELKFLCM 207
QY 181 LR 182
Db 208 LR 209

RESULT 11
```

```

US-09-965-528-10
; Sequence 10, Application US/09965528
; Publication No. US20020187523A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BURFORD, Neil
; APPLICANT: BANDMAN, Olga
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: AZIMZAI, Valda
; APPLICANT: LU, Dyung Aina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
; FILE REFERENCE: PF-0701 USA
; CURRENT APPLICATION NUMBER: US/09/965,528
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/134,949
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/144,270
; PRIOR FILING DATE: 1999-07-15
; PRIOR APPLICATION NUMBER: 60/146,700
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 60/157,508
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PERL Program
; SEQ ID NO 10
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020187523A1 5090841CD1
US-09-965-528-10

Query Match      69.8%; Score 127; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLYPANYSDDSKIWPRVPEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLYPANYSDDSKIWPRVPEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 12
US-10-147-493-172
; Sequence 172, Application US/10147493
; Publication No. US20040029217A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
```

APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C345
CURRENT APPLICATION NUMBER: US/13/147,493
CURRENT FILING DATE: 2002-05-17
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-147-493-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSDSKIWRPVEIFRLVSKY 120
Db
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 13
US-10-145-127-172
Sequence 172, Application US/10145127
Publication No. US2004003358A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C252
CURRENT APPLICATION NUMBER: US/13/145,127
CURRENT FILING DATE: 2002-05-13
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-145-127-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 14
US-10-160-503-172
Sequence 172, Application US/10160503
Publication No. US20040033559A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C446
CURRENT APPLICATION NUMBER: US/10/160,503
CURRENT FILING DATE: 2002-05-30
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-160-503-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 15
US-10-143-118-172
Sequence 172, Application US/10143118
Publication No. US20040038335A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen

```
; APPLICANT: Gao,Wei-Qiang
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Gurney,Austin L.
; APPLICANT: Sherwood,Steven
; APPLICANT: Smith,Victoria
; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C228
; CURRENT APPLICATION NUMBER: US/10/143,118
; CURRENT FILING DATE: 2002-05-09
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-143-118-172

Query Match      69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred.No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSSLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSSLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 ONEISDR 127
Db 121 ONEISDR 127
```

```
RESULT 16
US-10-144-993-172
; Sequence 172, Application US/10144993
; Publication No. US20040038336A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C261
; CURRENT APPLICATION NUMBER: US/10/144,993
; CURRENT FILING DATE: 2002-05-13
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
```

```
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-144-993-172

Query Match      69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred.No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSSLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSSLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 ONEISDR 127
Db 121 ONEISDR 127

RESULT 17
US-10-158-787-172
; Sequence 172, Application US/10158787
; Publication No. US20040039164A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C449
; CURRENT APPLICATION NUMBER: US/10/158,787
; CURRENT FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
```



```

; ORGANISM: Homo Sapien
US-10-158-787-172

Query Match      69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 18
US-09-969-984-10
; Sequence 10, Application US/09969984
; Publication No. US20040048244A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BUREFORD, Neil
; APPLICANT: BANDMAN, Olga
; APPLICANT: BAUGHN, Mariat R.
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: LU, Dylug Aina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
; FILE REFERENCE: PF-0701-1 USA
; CURRENT APPLICATION NUMBER: US/09/969,984
; CURRENT FILING DATE: 2001-10-02
; PRIOR APPLICATION NUMBER: 60/134,949; 60/144,270; 60/146,700; 60/157,508
; PRIOR FILING DATE: 1999-05-19; 1999-07-15; 1999-07-30; 1999-10-04
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PERL Program
; SEQ ID NO 10
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20040048244A1 5090841CD1
US-09-969-984-10

Query Match      69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 19
US-10-140-024-172
; Sequence 172, Application US/10140024
; Publication No. US20040058424A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C182
; CURRENT APPLICATION NUMBER: US/10/140,024
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-024-172

Query Match      69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 20
US-10-140-808-172
; Sequence 172, Application US/10140808
; Publication No. US20030017563A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C182
; CURRENT APPLICATION NUMBER: US/10/140,024
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-024-172
```


QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 23
US-10-127-900A-172
; Sequence 172, Application US/10127900A
; Publication No. US20030203429A1
; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME

; FILE REFERENCE: P3330R1C81
; CURRENT APPLICATION NUMBER: US/10/127,900A

; CURRENT FILING DATE: 2002-10-15
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien

US-10-127-900A-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120

QY 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 24

US-10-128-685A-172
; Sequence 172, Application US/10128685A
; Publication No. US20030203430A1
; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME

; FILE REFERENCE: P3330R1C116
; CURRENT APPLICATION NUMBER: US/10/128,685A

; CURRENT FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien

US-10-128-685A-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWPRPVEIFRLVSKY 120

QY 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 25

US-10-131-820A-172
; Sequence 172, Application US/10131820A
; Publication No. US20030203431A1

GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; TITLE OF INVENTION: ACIDS ENCODING THE SAME

; FILE REFERENCE: P3330R1C144

; CURRENT APPLICATION NUMBER: US/10/131,820A

; CURRENT FILING DATE: 2002-10-17

; PRIOR APPLICATION NUMBER: 60/049911

; PRIOR FILING DATE: 1997-06-18

; PRIOR APPLICATION NUMBER: 60/056974

; PRIOR FILING DATE: 1997-08-26

; PRIOR APPLICATION NUMBER: 60/059113

; PRIOR FILING DATE: 1997-09-17

; PRIOR APPLICATION NUMBER: 60/059115

; PRIOR FILING DATE: 1997-09-17

; PRIOR APPLICATION NUMBER: 60/059117

; PRIOR FILING DATE: 1997-09-17

; PRIOR APPLICATION NUMBER: 60/059122

; PRIOR FILING DATE: 1997-09-17

; PRIOR APPLICATION NUMBER: 60/059184

; PRIOR FILING DATE: 1997-09-17

; PRIOR APPLICATION NUMBER: 60/059263

; PRIOR FILING DATE: 1997-09-18

; PRIOR APPLICATION NUMBER: 60/059352

; PRIOR FILING DATE: 1997-09-19

; PRIOR APPLICATION NUMBER: 60/059588

; PRIOR FILING DATE: 1997-09-19

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 172

; LENGTH: 182

; TYPE: PRT

; ORGANISM: Homo Sapien

US-10-131-820A-172

Query Match 69.8%; Score 127; DB 12; Length 182;

Best Local Similarity 100.0%; Pred. No. 4.2e-111;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy

1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Db

1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Qy

61 NACIGTSICKFFKEEIRSDNWLASHLGLPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Db

61 NACIGTSICKFFKEEIRSDNWLASHLGLPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy

121 QNEISDR 127

Db

121 QNEISDR 127

RESULT 26

US-10-142-886-172

; Sequence 172, Application US/10142886

; Publication No. US20030203432A1

GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; TITLE OF INVENTION: ACIDS ENCODING THE SAME

; FILE REFERENCE: P3330R1C236

; CURRENT APPLICATION NUMBER: US/10/142,886

; CURRENT FILING DATE: 2002-05-10

; Prior Application removed - See File Wrapper or Palm

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 172

; LENGTH: 182

; TYPE: PRT

; ORGANISM: Homo Sapien

US-10-142-886-172

Query Match 69.8%; Score 127; DB 12; Length 182;

Best Local Similarity 100.0%; Pred. No. 4.2e-111;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy

1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Db

1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Qy

61 NACIGTSICKFFKEEIRSDNWLASHLGLPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Db

61 NACIGTSICKFFKEEIRSDNWLASHLGLPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy

121 QNEISDR 127

Db

121 QNEISDR 127

RESULT 27

US-10-146-728-172

; Sequence 172, Application US/10146728

; Publication No. US20030203437A1

GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C321
CURRENT APPLICATION NUMBER: US/10/146,728
CURRENT FILING DATE: 2002-05-15
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-146-728-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 28
US-10-146-786-172
Sequence 172, Application US/10146786
Publication No. US20030203438A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C313
CURRENT APPLICATION NUMBER: US/10/146,786
CURRENT FILING DATE: 2002-05-15
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-146-786-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 29
US-10-147-499-172
Sequence 172, Application US/10147499
Publication No. US20030203439A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C348
CURRENT APPLICATION NUMBER: US/10/147,499
CURRENT FILING DATE: 2002-05-17
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-147-499-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 30
US-10-157-798-172
Sequence 172, Application US/10157798
Publication No. US20030203440A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc

```

; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330RIC443
; CURRENT APPLICATION NUMBER: US/10/157,798
; CURRENT FILING DATE: 2002-05-29
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-157-798-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 31
US-10-028-072-172
; Sequence 172, Application US/10028072
; Publication No. US20030004311A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang
; TITLE OF INVENTION:
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/028,072
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059836
; PRIOR FILING DATE: 1997-09-24
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062285
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062814
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/062816
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063045
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063082
; PRIOR FILING DATE: 1997-10-31
; PRIOR APPLICATION NUMBER: 60/063127
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063327
; PRIOR FILING DATE: 1997-10-27
; PRIOR APPLICATION NUMBER: 60/063329
; PRIOR FILING DATE: 1997-10-27
; PRIOR APPLICATION NUMBER: 60/063550
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063561
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063704
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063733
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063735
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063738
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063755
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064248
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/064809
; PRIOR FILING DATE: 1997-11-07
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065846
; PRIOR FILING DATE: 1997-11-17
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/066453
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/066511
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/066770
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/069212
; PRIOR FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: 60/069278
; PRIOR FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: 60/069334
```


;; PRIOR FILING DATE: 1997-12-11
;; PRIOR APPLICATION NUMBER: 60/069694
;; PRIOR FILING DATE: 1997-12-16
;; PRIOR APPLICATION NUMBER: 60/072320
;; PRIOR FILING DATE: 1998-01-23
;; PRIOR APPLICATION NUMBER: 60/073612
;; PRIOR FILING DATE: 1998-02-04
;; PRIOR APPLICATION NUMBER: 60/074086
;; PRIOR FILING DATE: 1998-02-09
;; PRIOR APPLICATION NUMBER: 60/074092
;; PRIOR FILING DATE: 1998-02-09
;; PRIOR APPLICATION NUMBER: 60/077791
;; PRIOR FILING DATE: 1998-03-12
;; PRIOR APPLICATION NUMBER: 60/078910
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/079294
;; PRIOR FILING DATE: 1998-03-25
;; PRIOR APPLICATION NUMBER: 60/079663
;; PRIOR FILING DATE: 1998-02-27
;; PRIOR APPLICATION NUMBER: 60/079728
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/080165
;; PRIOR FILING DATE: 1998-03-31
;; PRIOR APPLICATION NUMBER: 60/081203
;; PRIOR FILING DATE: 1998-04-09
;; PRIOR APPLICATION NUMBER: 60/081229
;; PRIOR FILING DATE: 1998-04-09
;; PRIOR APPLICATION NUMBER: 60/081695
;; PRIOR FILING DATE: 1998-04-14
;; PRIOR APPLICATION NUMBER: 60/081817
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081818
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/082999
;; PRIOR FILING DATE: 1998-04-24
;; PRIOR APPLICATION NUMBER: 60/083322
;; PRIOR FILING DATE: 1998-04-28
;; PRIOR APPLICATION NUMBER: 60/083545
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/084600
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084627
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084637
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/085149
;; PRIOR FILING DATE: 1998-05-12
;; PRIOR APPLICATION NUMBER: 60/085323
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085338
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085339
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085579
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/086414
;; PRIOR FILING DATE: 1998-05-22
;; PRIOR APPLICATION NUMBER: 60/086430
;; PRIOR FILING DATE: 1998-05-22
;; PRIOR APPLICATION NUMBER: 60/087106
;; PRIOR FILING DATE: 1998-05-28
;; PRIOR APPLICATION NUMBER: 60/088026
;; PRIOR FILING DATE: 1998-06-04
;; PRIOR APPLICATION NUMBER: 60/088730
;; PRIOR FILING DATE: 1998-06-10
;; PRIOR APPLICATION NUMBER: 60/088741
;; PRIOR FILING DATE: 1998-06-10
;; PRIOR APPLICATION NUMBER: 60/088810
;; PRIOR FILING DATE: 1998-06-10

;; PRIOR APPLICATION NUMBER: 60/088858
;; PRIOR FILING DATE: 19/98-06-11
;; PRIOR APPLICATION NUMBER: 60/089532
;; PRIOR FILING DATE: 1998-06-17
;; PRIOR APPLICATION NUMBER: 60/089599
;; PRIOR FILING DATE: 1998-06-17
;; PRIOR APPLICATION NUMBER: 60/089907
;; PRIOR FILING DATE: 1998-06-18
;; PRIOR APPLICATION NUMBER: 60/089947
;; PRIOR FILING DATE: 1998-06-19
;; PRIOR APPLICATION NUMBER: 60/090349
;; PRIOR FILING DATE: 1998-06-23
;; PRIOR APPLICATION NUMBER: 60/090429
;; PRIOR FILING DATE: 1998-06-24
;; PRIOR APPLICATION NUMBER: 60/090445
;; PRIOR FILING DATE: 1998-06-24
;; PRIOR APPLICATION NUMBER: 60/090538
;; PRIOR FILING DATE: 1998-06-24
;; PRIOR APPLICATION NUMBER: 60/090863
;; PRIOR FILING DATE: 1998-06-26
;; PRIOR APPLICATION NUMBER: 60/091360
;; PRIOR FILING DATE: 1998-07-01
;; PRIOR APPLICATION NUMBER: 60/091519
;; PRIOR FILING DATE: 1998-07-02
;; PRIOR APPLICATION NUMBER: 60/091982
;; PRIOR FILING DATE: 1998-07-07

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALPCGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGDKC 60
|||
Db 1 MEPQLGPEAAALPCGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPDPSSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120
|||
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPDPSSLLSYYPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
|||
Db 121 QNEISDR 127

RESULT 32

US-10-121-049-172
; Sequence 172, Application US/10121049
; Publication No. US2003002239A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C17
; CURRENT APPLICATION NUMBER: US/10/121,049
; CURRENT FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550

```

; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-121-049-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 3; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
    |||||
Db 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
    |||||
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
    |||||
Db 121 QNEISDR 127

RESULT 33
US-10-123-904-172
; Sequence 172, Application US/10123904
; Publication No. US20030022328A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C54
; CURRENT APPLICATION NUMBER: US/10/123,904
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-904-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
    |||||
Db 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
    |||||
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
    |||||
Db 121 QNEISDR 127

US-10-123-904-172
; Sequence 172, Application US/10123904
; Publication No. US20030022328A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C54
; CURRENT APPLICATION NUMBER: US/10/123,904
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-904-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
    |||||
Db 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
    |||||
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
    |||||
Db 121 QNEISDR 127
```

```

RESULT 34
US-10-140-470-172
; Sequence 172, Application US/10140470
; Publication No. US20030022331A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C160
; CURRENT APPLICATION NUMBER: US/10/140,470
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-470-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
    |||||
Db 1 MEPQLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
    |||||
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
    |||||
Db 121 QNEISDR 127

RESULT 35
US-10-175-746-172
; Sequence 172, Application US/10175746
; Publication No. US20030027270A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
```

```
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C353
; CURRENT APPLICATION NUMBER: US/10/175,746
; CURRENT FILING DATE: 2002-06-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-175-746-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred.No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 36
US-10-176-918-172
; Sequence 172, Application US/10176918
; Publication No. US20030027275A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C382
; CURRENT APPLICATION NUMBER: US/10/176,918
; CURRENT FILING DATE: 2002-06-20
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-918-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred.No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLJXC 60
```

```
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 37
US-10-176-921-172
; Sequence 172, Application US/10176921
; Publication No. US20030027276A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C288
; CURRENT APPLICATION NUMBER: US/10/176,921
; CURRENT FILING DATE: 2002-06-20
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-921-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred.No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 38
US-10-137-865-172
; Sequence 172, Application US/10137865
; Publication No. US20030032155A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
```



```
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C154
; CURRENT APPLICATION NUMBER: US/10/137,865
; CURRENT FILING DATE: 2002-05-03
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-137-865-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
    |||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIMRPVEIFRLVSKY 120
    |||
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIMRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
    |||
Db 121 QNEISDR 127

RESULT 40
US-10-142-431-172
; Sequence 172, Application US/10142431
; Publication No. US20030036179A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C251
; CURRENT APPLICATION NUMBER: US/10/142,431
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-431-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
    |||
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIMRPVEIFRLVSKY 120
    |||
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSDSKIMRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
    |||
Db 121 QNEISDR 127

US-10-140-474-172
; Sequence 172, Application US/10140474
; Publication No. US20030032156A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C162
; CURRENT APPLICATION NUMBER: US/10/140,474
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
```

```
RESULT 41
US-10-143-114-172
; Sequence 172, Application US/10143114
; Publication No. US20030036180A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C211
; CURRENT APPLICATION NUMBER: US/10/143,114
; CURRENT FILING DATE: 2002-05-09
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-143-114-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 42
US-10-140-002-172
; Sequence 172, Application US/10140002
; Publication No. US20030037623A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 43
US-10-142-419-172
; Sequence 172, Application US/10142419
; Publication No. US20030044945A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C244
; CURRENT APPLICATION NUMBER: US/10/142,419
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-419-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127
```

```
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C59
; CURRENT APPLICATION NUMBER: US/10/140,002
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-002-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 43
US-10-142-419-172
; Sequence 172, Application US/10142419
; Publication No. US20030044945A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C244
; CURRENT APPLICATION NUMBER: US/10/142,419
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-419-172

Query Match          69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127
```

Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 44

US-10-123-262-172

; Sequence 172, Application US/10123262
; Publication No. US20030049816A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C38
; CURRENT APPLICATION NUMBER: US/10/123,262
; CURRENT FILING DATE: 2002-04-15
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-262-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 45

US-10-142-423-172

; Sequence 172, Application US/10142423
; Publication No. US20030049817A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C249
; CURRENT APPLICATION NUMBER: US/10/142,423
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-423-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 46

US-10-121-050-172

; Sequence 172, Application US/10121050
; Publication No. US20030054516A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C20
; CURRENT APPLICATION NUMBER: US/10/121,050
; CURRENT FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182


```
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-121-050-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
      |||
Db      1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY      61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
      |||
Db      61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY      121 QNEISDR 127
      |||
Db      121 QNEISDR 127
```

```
RESULT 47
US-10-141-755-172
; Sequence 172, Application US/10141755
; Publication No. US20030054517A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C192
; CURRENT APPLICATION NUMBER: US/10/141,755
; CURRENT FILING DATE: 2002-05-08
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-141-755-172
```

```
Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
      |||
Db      1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY      61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
      |||
Db      61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY      121 QNEISDR 127
      |||
Db      121 QNEISDR 127
```

```
RESULT 48
US-10-143-032-172
; Sequence 172, Application US/10143032
; Publication No. US20030059909A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C245
; CURRENT APPLICATION NUMBER: US/10/143,032
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-143-032-172
```

```
Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
      |||
Db      1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

QY      61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
      |||
Db      61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY      121 QNEISDR 127
      |||
Db      121 QNEISDR 127
```

```
RESULT 49
US-10-123-108-172
; Sequence 172, Application US/10123108
; Publication No. US20030068793A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
```

APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C36
CURRENT APPLICATION NUMBER: US/13/123,108
PRIOR FILING DATE: 2002-04-15
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059836
PRIOR FILING DATE: 1997-09-24
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062285
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062287
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062814
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/062816
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063045
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063082
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/063127
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063327
PRIOR FILING DATE: 1997-10-27
PRIOR APPLICATION NUMBER: 60/063329
PRIOR FILING DATE: 1997-10-27
PRIOR APPLICATION NUMBER: 60/063550
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063561
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063704
PRIOR FILING DATE: 1997-10-29
PRIOR APPLICATION NUMBER: 60/063733
PRIOR FILING DATE: 1997-10-29
PRIOR APPLICATION NUMBER: 60/063735
PRIOR FILING DATE: 1997-10-29
PRIOR APPLICATION NUMBER: 60/063738
PRIOR FILING DATE: 1997-10-29
PRIOR APPLICATION NUMBER: 60/063755
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064248
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/064809
PRIOR FILING DATE: 1997-11-07
PRIOR APPLICATION NUMBER: 60/065186
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065846
PRIOR FILING DATE: 1997-11-17
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/066453
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/066511
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/066770
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/069212
PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069278
PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069334
PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069694
PRIOR FILING DATE: 1997-12-16
PRIOR APPLICATION NUMBER: 60/072320
PRIOR FILING DATE: 1998-01-23
PRIOR APPLICATION NUMBER: 60/073612
PRIOR FILING DATE: 1998-02-04
PRIOR APPLICATION NUMBER: 60/074086
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: 60/074092
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079663
PRIOR FILING DATE: 1998-02-27
PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/080165
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/081203
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081229
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081695
PRIOR FILING DATE: 1998-04-14
PRIOR APPLICATION NUMBER: 60/081817
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081818
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082999
PRIOR FILING DATE: 1998-04-24
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085149
PRIOR FILING DATE: 1998-05-12
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/086414
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/086430
PRIOR FILING DATE: 1998-05-22

1	PRIOR APPLICATION NUMBER: 60/087106
2	PRIOR FILING DATE: 1998-05-28
3	PRIOR APPLICATION NUMBER: 60/088026
4	PRIOR FILING DATE: 1998-06-04
5	PRIOR APPLICATION NUMBER: 60/088730
6	PRIOR FILING DATE: 1998-06-10
7	PRIOR APPLICATION NUMBER: 60/088741
8	PRIOR FILING DATE: 1998-06-10
9	PRIOR APPLICATION NUMBER: 60/088810
10	PRIOR FILING DATE: 1998-06-10
11	PRIOR APPLICATION NUMBER: 60/088858
12	PRIOR FILING DATE: 1998-06-11
13	PRIOR APPLICATION NUMBER: 60/089532
14	PRIOR FILING DATE: 1998-06-17
15	PRIOR APPLICATION NUMBER: 60/089599
16	PRIOR FILING DATE: 1998-06-17
17	PRIOR APPLICATION NUMBER: 60/089907
18	PRIOR FILING DATE: 1998-06-18
19	PRIOR APPLICATION NUMBER: 60/089947
20	PRIOR FILING DATE: 1998-06-19
21	PRIOR APPLICATION NUMBER: 60/090349
22	PRIOR FILING DATE: 1998-06-23
23	PRIOR APPLICATION NUMBER: 60/090429
24	PRIOR FILING DATE: 1998-06-24
25	PRIOR APPLICATION NUMBER: 60/090445
26	PRIOR FILING DATE: 1998-06-24
27	PRIOR APPLICATION NUMBER: 60/090538
28	PRIOR FILING DATE: 1998-06-24
29	PRIOR APPLICATION NUMBER: 60/090863
30	PRIOR FILING DATE: 1998-06-26
31	PRIOR APPLICATION NUMBER: 60/091360
32	PRIOR FILING DATE: 1998-07-01
33	PRIOR APPLICATION NUMBER: 60/091519
34	PRIOR FILING DATE: 1998-07-02
35	PRIOR APPLICATION NUMBER: 60/091982

```

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPOLGPEAAALPCWLAALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
        |||||
Db      1 MEPOLGPEAAALPCWLAALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
        |||||

QY      61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSPANYSDDSKIWRPVEIFRLVSKY 120
        |||||
Db      61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLSPANYSDDSKIWRPVEIFRLVSKY 120
        |||||

QY      121 QNEISDR 127
        |||||
Db      121 ONEISDR 127
        |||||

```

RESULT 53

US-10-123-236-172

; Sequence 172, Application US/10123236

; Publication No. US20030068795A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

```

1 APPLICANT: Wood,William
2 APPLICANT: Zhang, Zemin
3 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
4 TITLE OF INVENTION: ACIDS ENCODING THE SAME
5 FILE REFERENCE: P3330RJIC33
6 CURRENT APPLICATION NUMBER: US/10/123,236
7 CURRENT FILING DATE: 2002-04-15
8 Prior Application removed - See File Wrapper or Palm
9 NUMBER OF SEQ ID NOS: 550
10 SEQ ID NO 172
11 LENGTH: 182
12 TYPE: PRT
13 ORGANISM: Homo Sapien
14 US-10-123-236-172

```

	Query Match	69.8%;	Score 127;	DB 14;	Length 182;
	Best Local Similarity	100.0%;	Pred. No.	4.2e-111;	
	Matches 127;	Conservative	0;	Mismatches	0; Indels
					0; Gaps
					0;
Qy	1	MEPQLGPEAAALPCGWLALLLVWSALS	CSFSLPASSLSLLVPQVRTSYN	EGRTFLGLDKC	60
Dd	1	MEPQLGPEAAALPCGWLALLLVWSALS	CSFSLPASSLSLLVPQVRTSYN	EGRTFLGLDKC	60
Qy	61	NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPV	EIFRLVSKY	120	
Dd	61	NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPANYSDDSKIWRPV	EIFRLVSKY	120	
Qy	121	ONEISDR	127		
Dd	121	ONEISDR	127		

Search completed: June 14, 2004, 08:10:19
Job time : 45 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 08:04:11 ; Search time 20 Seconds
(without alignments)
875.343 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPLGPBAALRPGWLALL.....DLVQDCHQGRBLKFLCMLR 182

Scoring table: CLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283366 seqs, 96191526 residues

Word size : 0

Total number of hits satisfying chosen parameters: 233366

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : PIR_78:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	8	4.4	271	2	G70777
2	8	4.4	543	2	E95057
3	8	4.4	543	2	G97926
4	7	3.8	111	2	S25343
5	7	3.8	130	2	G72639
6	7	3.8	132	2	F96779
7	7	3.8	147	2	S76142
8	7	3.8	192	2	S53555
9	7	3.8	208	2	T52450
10	7	3.8	222	2	A75406
11	7	3.8	223	2	S16267
12	7	3.8	251	2	AH3314
13	7	3.8	258	2	AD0615
14	7	3.8	259	2	G64831
15	7	3.8	259	2	C90754
16	7	3.8	259	2	A85618
17	7	3.8	266	2	H82387
18	7	3.8	270	2	F64050
19	7	3.8	272	2	T18915
20	7	3.8	274	2	S27434
21	7	3.8	277	2	I47162
22	7	3.8	292	2	T49261
23	7	3.8	328	2	I47161
24	7	3.8	328	2	I47158
25	7	3.8	328	2	I47160
26	7	3.8	328	2	I47159
27	7	3.8	341	2	T51897
28	7	3.8	344	2	J50571
29	7	3.8	344	2	B39133
					hypothetical prote
					Na/Pi cotransporte
					conserved hypothet
					QR15 protein - yea
					hypothetical prote
					probable ribosomal
					hypothetical prote
					probable membrane
					ribosomal protein
					auxin-induced prot
					hypothetical membr
					probable membrane
					probable membrane
					hypothetical prote
					hypothetical prote
					glucosamine-6-phos
					hypothetical prote
					26S proteasome reg
					Ig gamma 4 chain c
					hypothetical prote
					Ig gamma 3 chain c
					Ig gamma 1 chain c
					Ig gamma 2b chain
					Ig gamma 2a chain
					related to scorbite
					transcription acti
					lima protein - Pse

30	7	3.8	353	2	S36249	lipB protein - Pse
31	7	3.8	391	2	C87547	p-hydroxybenzoate
32	7	3.8	402	1	RERTK	renin [EC 3.4.23.1
33	7	3.8	475	2	A38340	66K glycoprotein p
34	7	3.8	476	2	T40330	hypothetical prote
35	7	3.8	674	2	A47222	Kallmann syndrome
36	7	3.8	676	2	B47222	Kallmann syndrome
37	7	3.8	682	2	AE0033	secretion system a
38	7	3.8	702	1	A48562	coat protein - San
39	7	3.8	716	2	S45262	NF-A1 component -
40	7	3.8	718	2	JC5805	transcription fact
41	7	3.8	789	2	T09672	ent-kaurene syntha
42	7	3.8	791	2	AF2235	hypothetical prote
43	7	3.8	836	2	C82726	DNA uptake protein
44	7	3.8	863	2	D88465	protein B0244.7 [i
45	7	3.8	903	2	T00358	hypothetical prote
46	7	3.8	982	2	T06576	probable protein k
47	7	3.8	1008	2	T32986	hypothetical prote
48	7	3.8	1014	2	H86438	protein T19E23.7 [
49	7	3.8	1029	2	T05050	protein kinase hom
50	7	3.8	1329	2	C69048	cobalamin biosynth
51	7	3.8	1670	2	T06754	DNA-directed RNA p
52	7	3.8	1711	2	C71625	variant-specific s
53	7	3.8	2559	2	T09144	probable guanidine n
54	7	3.8	2684	2	A96521	protein F21D18.22
55	6	3.3	58	2	AC1517	hypothetical prote
56	6	3.3	67	2	T11367	H+-transporting tw
57	6	3.3	75	2	D61399	hypothetical early
58	6	3.3	76	1	W5WL58	E5 protein - human
59	6	3.3	82	2	F72276	conserved hypothet
60	6	3.3	82	2	AF3159	hypothetical prote
61	6	3.3	92	2	D72223	conserved hypothet
62	6	3.3	98	2	S78727	protein YLL018c-a
63	6	3.3	100	2	H72577	hypothetical prote
64	6	3.3	101	2	F71059	hypothetical prote
65	6	3.3	107	2	F71121	hypothetical prote
66	6	3.3	109	2	H82901	conserved hypothet
67	6	3.3	113	2	T10028	hypothetical prote
68	6	3.3	114	2	S48982	hypothetical prote
69	6	3.3	114	2	AI3204	IS66 family orf2 [
70	6	3.3	117	2	H71180	hypothetical prote
71	6	3.3	120	2	G33932	Ig kappa chain pre
72	6	3.3	125	2	F81226	lipoprotein, proba
73	6	3.3	129	1	WMVZP6	F6 protein - fowlp
74	6	3.3	130	2	C55546	flagellar protein
75	6	3.3	130	2	AD0745	flagellar protein
76	6	3.3	130	2	S57137	probable membrane
77	6	3.3	130	2	B95873	hypothetical prote
78	6	3.3	130	2	F70908	hypothetical prote
79	6	3.3	133	2	PS0023	Ig kappa chain pre
80	6	3.3	134	2	PC1214	Ig kappa chain pre
81	6	3.3	136	2	T07975	probable arabinoga
82	6	3.3	136	2	T07945	probable arabinoga
83	6	3.3	137	2	S75689	hypothetical prote
84	6	3.3	138	2	S26040	Ig kappa chain pre
85	6	3.3	138	2	S56851	probable membrane
86	6	3.3	140	2	C71176	hypothetical prote
87	6	3.3	141	1	QQVLC1	gene X protein - w
88	6	3.3	142	2	JC4997	hypothetical 15.7k
89	6	3.3	142	2	G84194	hypothetical prote
90	6	3.3	145	2	PL0014	Ig kappa chain pre
91	6	3.3	147	1	A58802	probable tumor sup
92	6	3.3	148	2	S42924	ZG-16p protein - r
93	6	3.3	149	2	S75733	hypothetical prote
94	6	3.3	149	2	H70581	hypothetical prote
95	6	3.3	153	2	T04614	hypothetical prote
96	6	3.3	154	2	D83768	bacterioferritin c
97	6	3.3	154	2	E72534	hypothetical prote
98	6	3.3	154	2	AI2580	conserved hypothet
99	6	3.3	154	2	G97362	hypothetical prote
100	6	3.3	155	2	F83341	hypothetical prote

ALIGNMENTS

RESULT 1
G70777
hypothetical protein Rv2235 - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 28-Jul-2000
C;Accession: G70777
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
A;Authors: Sgares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complete genome
A;Reference number: A70500; MUID:98295987; PMID:9634230
A;Accession: G70777
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-271 <COL>
A;Cross-references: GB:Z70692; GB:AL123456; NID:G3261567; PIDN:CRA94657.1; PID:gl261937
A;Experimental source: strain H37RV
C;Genetics:
A;Gene: Rv2235
C;Superfamily: Mycobacterium leprae hypothetical protein MLCB1243.32c

Query Match 4.4%; Score 8; DB 2; Length 271;
Best Local Similarity 100.0%; Pred. No. 5.5;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 LRPGWLAL 19
|||
Db 8 LRPGWLAL 15

RESULT 2
E95057
Na/Pi cotransporter II-related protein SP0496 [imported] - Streptococcus pneumoniae (str
C;Species: Streptococcus pneumoniae
C;Date: 03-Aug-2001 #sequence_revision 03-Aug-2001 #text_change 03-Aug-2001
C;Accession: E95057
R;Tettelin, H.; Nelson, K.E.; Paulsen, I.T.; Eisen, J.A.; Read, T.D.; Peterson, S.; Heid
on, J.D.; Umayam, L.A.; White, O.; Salzberg, S.L.; Lewis, M.R.; Radune, D.; Holtzapfle,
nson, T.; Hickey, E.K.; Holt, I.E. Science 293, 498-506, 2001
A;Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, B.A.; Morrison,
A;Title: Complete Genome Sequence of a virulent isolate of Streptococcus pneumoniae.
A;Reference number: A95000; MUID:21357209; PMID:11463916
A;Accession: E95057
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-543 <KUR>
A;Cross-references: GB:AE005672; PIDN:AAK74654.1; PID:gl4971968; GSPDB:GN00164; TIGR:SP4
A;Experimental source: strain TIGR4
C;Genetics:
A;Gene: SP0496

Query Match 4.4%; Score 8; DB 2; Length 543;
Best Local Similarity 100.0%; Pred. No. 9.8;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 141 IERVLRKT 148
|||
Db 492 IERVLRKT 499

RESULT 3
G97926
conserved hypothetical protein spr0439 [imported] - Streptococcus pneumoniae (strain R6)
C;Species: Streptococcus pneumoniae
C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 22-Oct-2001
C;Accession: G97926
R;Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blaszczak, L.; Burgett, S.; DeHoff, B.S.; F

e, R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, J.; Matsushima, P.; McAhren, S.;
Y, P.; Sun, P.M.; Winkler, M.E.
J. Bacteriol. 183, 5709-5717, 2001
A;Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; Jaskunas, S.R
A;Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
A;Reference number: A97872; MUID:21429245; PMID:11544234
A;Accession: G97926
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-543 <KUR>
A;Cross-references: GB:AE007317; PIDN:AAK99243.1; PID:gl5458006; GSPDB:GN00174
C;Genetics:
A;Gene: spr0439

Query Match 4.4%; Score 8; DB 2; Length 543;
Best Local Similarity 100.0%; Pred. No. 9.8;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 141 IERVLRKT 148
|||
Db 492 IERVLRKT 499

RESULT 4
S25343
QRI5 protein - Yeast (Saccharomyces cerevisiae)
N;Alternate names: protein I8167.17.a; protein YLR204w
C;Species: Saccharomyces cerevisiae
C;Date: 12-Mar-1993 #sequence_revision 12-Mar-1993 #text_change 20-Sep-1999
C;Accession: S25343; S48555
R;Simon, M.; della Seta, F.; Sor, F.; Faye, G. Yeast 8, 559-567, 1992
A;Title: Analysis of the MSS51 region on chromosome XII of Saccharomyces cerevisiae.
A;Reference number: S25342; MUID:92397593; PMID:1523888
A;Accession: S25343
A;Status: not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 1-111 <SIM>
A;Cross-references: GB:S43721; NID:G255246; PIDN:AAB23217.1; PID:G255248
R;Pauley, A. submitted to the EMBL Data Library, September 1994
A;Description: The sequence of S. cerevisiae cosmid 8167.
A;Reference number: S48545
A;Accession: S48555
A;Molecule type: DNA
A;Residues: 1-111 <PAU>
A;Cross-references: EMBL:U14913; NID:G544497; PID:G544504; MIPS:YLR204w
C;Genetics:
A;Gene: SGD:QRI5
A;Cross-references: SGD:S0004194; MIPS:YLR204w
A;Map position: 12R
C;Superfamily: Saccharomyces QRI5 protein

Query Match 3.8%; Score 7; DB 2; Length 111;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 ALRPGWL 17
|||
Db 5 ALRPGWL 11

RESULT 5
G72609
hypothetical protein APE1341 - Aeropyrum pernix (strain K1)
C;Species: Aeropyrum pernix
C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Aug-1999
C;Accession: G72609
R;Kawarabayashi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Tak
awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.;
DNA Res. 6, 83-101, 1999
A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropy
A;Reference number: A72450; MUID:99310339; PMID:10382966

A;Accession: G72609
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-130 <KAW>
A;Cross-references: DDBJ:AP000061; NID:G5104821; PIDN:BAA80333.1; PID:d1044119; PID:G5104821
A;Experimental source: strain K1
C;Genetics:
A;Gene: APE1341

Query Match 3.8%; Score 7; DB 2; Length 130;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||||
Db 50 ASSLSL 56

RESULT 6

F96779
Probable ribosomal protein S9 F9E13.17 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
C;Accession: F96779
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso,
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.;
ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.
C.A.; Li, J.H.; Li, Y.; Liu, X.; Liu, S.X.; Liu, Z.A.; Lueros, J.S.; Maiti, R.; Marziali,
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon,
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Accession: F96779
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-132 <STO>
A;Cross-references: GB:AB005173; NID:G6646766; PIDN:AAF21078.1; GSPDB:GN00141
C;Genetics:
A;Gene: F9E10.17
A;Map position: 1

Query Match 3.8%; Score 7; DB 2; Length 132;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||||
Db 8 ASSLSL 14

RESULT 7

S76142
hypothetical protein - Synechocystis sp. (strain PCC 6803)
C;Species: Synechocystis sp.
A;Variety: PCC 6803
C;Date: 25-Apr-1997 #sequence_revision 25-Apr-1997 #text_change 08-Oct-1999
C;Accession: S76142
R;Kaneko, T.; Sato, S.; Kotani, H.; Tanaka, A.; Asamizu, E.; Nakamura, Y.; Miyajima, N.;
O, K.; Okumura, S.; Shimpo, S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.; Yasuda
DNA Res. 3, 109-136, 1996
A;Title: Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis
s.
A;Reference number: S74322; MUID:97061201; PMID:8905231
A;Accession: S76142
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-147 <KAN>
A;Cross-references: EMBL:D90914; GB:AB001339; NID:G1653477; PIDN:BAA18401.1; PID:d101913
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996

Query Match 3.8%; Score 7; DB 2; Length 147;
Best Local Similarity 100.0%; Pred. No. 32;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 PGWLALL 20
|||||
Db 110 PGWLALL 116

RESULT 8

S53555
probable membrane protein YER148w-a - yeast (Saccharomyces cerevisiae)
C;Species: Saccharomyces cerevisiae
C;Date: 06-May-1995 #sequence_revision 01-Dec-1995 #text_change 23-Mar-2001
C;Accession: S53555
R;Dietrich, F.S.
submitted to the EMBL Data Library, December 1994
A;Description: The sequence of S. cerevisiae cosmid 8229, 9115, 9132, 9981, and lamb
A;Reference number: S50430
A;Accession: S53555
A;Molecule type: DNA
A;Residues: 1-192 <DIE>
A;Cross-references: EMBL:U18917; GSPDB:GN00005; MIPS:YER148w-a
C;Genetics:
A;Gene: MIPS:YER148w-a
A;Map position: 5R
C;Superfamily: Saccharomyces cerevisiae probable membrane protein YER148w-a
C;Keywords: transmembrane protein
F;51-67/Domain: transmembrane #status predicted <TM1>
F;102-118/Domain: transmembrane #status predicted <TM2>

Query Match 3.8%; Score 7; DB 2; Length 192;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||||
Db 32 ASSLSL 38

RESULT 9

T52450
ribosomal protein S9 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 24-Oct-2000 #sequence_revision 24-Oct-2000 #text_change 24-Oct-2000
C;Accession: T52450
R;Arimura, S.; Takusagawa, S.; Hatanoto, S.; Nakazono, M.; Hirai, A.; Tsutsumi, N.
FEBS Lett. 450, 231-234, 1999
A;Title: A novel plant nuclear gene encoding chloroplast ribosomal protein S9 has a t:
A;Reference number: Z26079
A;Accession: T52450
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-208 <ARI>
A;Cross-references: EMBL:AB022676; PIDN:BAA82396.1
C;Genetics:
A;Gene: rps9

Query Match 3.8%; Score 7; DB 2; Length 208;
Best Local Similarity 100.0%; Pred. No. 43;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||||
Db 8 ASSLSL 14

RESULT 10

A75406
hydrolyase - Deinococcus radiodurans (strain R1)
C;Species: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 17-Mar-2000
C;Accession: A75406

R;White, O.; Eisen, J.A.; Heideberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma
S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.

Science 286, 1571-1577, 1999
A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.

A;Reference number: A75250; MUID:20036896; PMID:10567266

A;Accession: A75406

A;Status: preliminary

A;Molecule type: DNA

A;Residues: 1-222 <WHI>

A;Cross-references: GB:AE001981; GB:AE000513; NID:G6459037; PIDN:AAF10916.1; PID:G645909

A;Experimental source: strain R1

C;Genetics:

A;Gene: DR1344

A;Map position: 1

C;Superfamily: Alcaligenes eutrophus phosphoglycolate phosphatase

Query Match 3.8%; Score 7; DB 2; Length 222;

Best Local Similarity 100.0%; Pred. No. 46;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11

Db 85 LGPEAAA 91

RESULT 11

S16267

auxin-induced protein (clones pGNT1 and pCNT110) - common tobacco

C;Species: Nicotiana tabacum (common tobacco)

C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 24-Sep-1999

C;Accession: S16267; S16270

R;van der Zaal, E.J.; Droog, F.N.J.; Boot, C.J.M.; Hensgens, L.A.M.; Hoge, J.H.C.; Schil

Plant Mol. Biol. 16, 983-998, 1991

A;Title: Promoters of auxin-induced genes from tobacco can lead to auxin-inducible and

A;Reference number: S16267; MUID:91322513; PMID:1863770

A;Accession: S16267

A;Molecule type: DNA

A;Residues: 1-223 <ZAA>

A;Cross-references: EMBL:X56268; NID:G19788; PIDN:CAA39709.1; PID:G19789

A;Experimental source: cultivar Samsun NK; tissue leaf; clone pGNT1

A;Accession: S16270

A;Molecule type: mRNA

A;Residues: 1-223 <ZAA>

A;Cross-references: EMBL:X56264; NID:G19794; PIDN:CAA39705.1; PID:G19795

A;Experimental source: cultivar White Burley; clone pCNT110

C;Genetics:

A;Introns: 103/3

C;Superfamily: auxin-induced protein

C;Keywords: auxin regulation

Query Match 3.8%; Score 7; DB 2; Length 223;

Best Local Similarity 100.0%; Pred. No. 46;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 131 ASASAPK 137

Db 217 ASASAPK 223

RESULT 12

AH3314

hypothetical membrane spanning protein BMEI0502 [imported] - Brucella melitensis (strain

C;Species: Brucella melitensis

C;Date: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 01-Feb-2002

C;Accession: AH3314

R;DelVecchio, V.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mijer, C.; Los, T.; Ivanova,

.; Mazur, M.; Goltsman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; Letess

proc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002

A;Title: The genome sequence of the facultative intracellular pathogen Brucella melitens

A;Reference number: AD3252; PMID:11756688

A;Accession: AH3314

A;Status: preliminary

A;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

F;13-29/Domain: transmembrane #status predicted <TM1>

F;39-55/Domain: transmembrane #status predicted <TM2>

A;Gene: ybcC

C;Superfamily: conserved hypothetical protein aq_1986

C;Keywords: transmembrane protein

Query Match 3.8%; Score 7; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
Db 46 GWLALLL 52

RESULT 15
C90754
hypothetical protein ECs1003 [imported] - Escherichia coli (strain O157:H7, substrain R1
C;Species: Escherichia coli
C;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 03-Aug-2001
C;Accession: C90754
R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G.
gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.
DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and geno
A;Reference number: A99629; MUID:21156231; PMID:11258796
A;Accession: C90754
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-259 <HAY>
A;Cross-references: GB:BA000007; PIDN:BA034426.1; PID:gl3360462; GSPDB:GN00154
A;Experimental source: strain O157:H7, substrain R1MD 0509952
C;Genetics:
A;Gene: ECs1003
C;Superfamily: conserved hypothetical protein aq_1986

Query Match 3.8%; Score 7; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
Db 46 GWLALLL 52

RESULT 16
A85618
hypothetical protein ybcC [imported] - Escherichia coli (strain O157:H7, substrain EDL93
C;Species: Escherichia coli
C;Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 14-Sep-2001
C;Accession: A85618
R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.; Mayhew
iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K.; Apodaca,
Nature 409, 529-533, 2001
A;Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7.
A;Reference number: A85480; MUID:21074935; PMID:11206551
A;Accession: A85618
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-259 <STO>
A;Cross-references: GB:AE005174; NID:gl2514089; PIDN:AAG55405.1; GSPDB:GN00145; UWGP:Z12
A;Experimental source: strain O157:H7, substrain EDL933
C;Genetics:
A;Gene: ybcC
C;Superfamily: conserved hypothetical protein aq_1986

Query Match 3.8%; Score 7; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
Db 46 GWLALLL 52

RESULT 17
H82387
Glucosamine-6-phosphate isomerase VCA1025 [imported] - Vibrio cholerae (strain N16961 se
C;Species: Vibrio cholerae

C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 02-Feb-2001
C;Accession: H82387
R;Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.
chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers,
l, R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 406, 477-483, 2000
A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A;Reference number: A82035; MUID:20406833; PMID:10952301
A;Accession: H82387
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-266 <HEI>
A;Cross-references: GB:AE003853; NID:g9658462; PIDN:AAF96921.1; GSPDB:GN00
A;Experimental source: serogroup O1; strain N16961; biotype El Tor
C;Genetics:
A;Gene: VCA1025
A;Map position: 2
C;Superfamily: glucosamine-6-phosphate isomerase

Query Match 3.8%; Score 7; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 149 PASSLSS 155

RESULT 18
F64050
glucosamine-6-phosphate deaminase (EC 3.5.99.6) - Haemophilus influenzae (strain Rd KW2
C;Species: Haemophilus influenzae
C;Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 28-Jul-2003
C;Accession: F64050
R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage,
; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman,
D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M.
Science 269, 496-512, 1995
A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter,
A;Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.
A;Reference number: A64000; MUID:95350630; PMID:7542800
A;Accession: F64050
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-270 <TIGR>
A;Cross-references: GB:U32700; GB:L42023; NID:g3212181; PIDN:AAC21813.1; PID:gl573097;
C;Superfamily: glucosamine-6-phosphate isomerase
C;Keywords: hydrolase; isomerase

Query Match 3.8%; Score 7; DB 2; Length 270;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 149 PASSLSS 155

RESULT 19
T18915
hypothetical protein C04F12.8 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T18915
R;Lloyd, C.
submitted to the EMBL Data Library, November 1996
A;Reference number: Z19044
A;Accession: T18915
A;Status: preliminary; translated from GB/EMBL/DD5J
A;Molecule type: DNA
A;Residues: 1-272 <WIL>
A;Cross-references: EMBL:Z81461; PIDN:CAB03837.1; GSPDB:GN00019; CESP:C04F12.8
A;Experimental source: clone C04F12

C;Genetics:
A;Gene: CESP:C04F12.8
A;Map position: 1
A;Introns: 53/1; 84/3; 204/2

Query Match 3.8%; Score 7; DB 2; Length 272;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 31 SLPASSL 37
|||||||
Db 229 SLPASSL 235

RESULT 20

S27434
26S proteasome regulatory complex chain RPN12 - yeast (Saccharomyces cerevisiae)
N;Alternate names: 26S proteasome regulatory complex chain p31 homolog; nuclear integrity
C;Species: Saccharomyces cerevisiae
C;Date: 07-May-1993 #sequence revision 07-May-1993 #text_change 20-Jun-2000
C;Accession: S27434; S56307; S62263; S63799
R;Nisogi, H.; Kominami, K.I.; Tanaka, K.; Toh-e, A.
submitted to the EMBL Data Library, July 1992
A;Description: A new essential gene of Saccharomyces cerevisiae, a defect of it may result
A;Reference number: S27434

A;Accession: S27434
A;Molecule type: DNA
A;Residues: 1-274 <NIS>
A;Cross-references: EMBL:D10515; NID:G218446; PIDN:BAA01390.1; PID:G218447
R;Murakami, Y.; Naitou, M.; Hagiwara, H.; Shibata, T.; Ozawa, M.; Sasanuma, S.I.; Sasanuma, S.I.;
submitted to the EMBL Data Library, May 1995
A;Description: Analysis of the nucleotide sequence of chromosome VI from Saccharomyces cerevisiae
A;Reference number: S56186
A;Accession: S56307
A;Molecule type: DNA
A;Residues: 1-274 <MUR>
A;Cross-references: EMBL:DS0617; NID:G836685; PIDN:BAA09291.1; PID:G836807; MIPS:YFR0524
R;Murakami, Y.
submitted to the EMBL Data Library, December 1994

A;Reference number: S62230
A;Accession: S62263
A;Molecule type: DNA
A;Residues: 1-274 <MUW>
A;Cross-references: EMBL:D44597; NID:G871938; PIDN:BAA08018.1; PID:G871951
R;Ekl, T.; Naitou, M.; Hagiwara, H.; Ozawa, M.; Sasanuma, S.I.; Sasanuma, M.; Tsuchiya, Y.
Yeast 12, 149-167, 1996
A;Title: Analysis of a 36.2 kb DNA sequence including the right telomere of chromosome V
A;Reference number: S63787; MUID:96287652; PMID:8686379
A;Accession: S63799
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-274 <EKL>
A;Cross-references: EMBL:D44597; NID:G871939; PIDN:BAA08018.1; PID:G871951
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1995
C;Genetics:
A;Gene: SGD:RPN12; NIN1
A;Cross-references: SGD:S0001948; MIPS:YFR0524
A;Map position: 6R
C;Superfamily: human 26S proteasome regulatory complex chain p31
C;Keywords: proteasome; protein degradation

Query Match 3.8%; Score 7; DB 2; Length 274;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 92 DSLLSYP 98
|||||||
Db 139 DSLLSYP 145

RESULT 21

I47162
Ig gamma 4 chain constant region - pig (fragment)

C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47162
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47162
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-277 <KAC>
A;Cross-references: EMBL:U03782; NID:G433129; PIDN:AAA52220.1; PID:G433130
C;Genetics:
A;Gene: IgG4
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;82-151/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 277;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
|||||||
Db 21 PASSLSS 27

RESULT 22

T49261
hypothetical protein F12M12.170 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Jun-2000 #sequence_revision 02-Jun-2000 #text_change 18-Aug-2000
C;Accession: T49261
R;Jordan, N.; Bangert, S.; Wiedelmann, R.; Voss, E.; Unseld, M.; Mewes, H.W.; Rudd, S.
submitted to the Protein Sequence Database, May 2000
A;Reference number: Z25020
A;Accession: T49261
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-292 <JOR>
A;Cross-references: EMBL:AL355775; GSPDB:GN00061; ATSP:F12M12.170
A;Experimental source: cultivar Columbia; BAC clone F12M12
C;Genetics:
A;Gene: ATSP:F12M12.170
A;Map position: 3
A;Introns: 29/3; 54/3; 83/2; 103/1; 152/3; 200/3; 253/3
C;Superfamily: Arabidopsis thaliana hypothetical protein F12M12.170

Query Match 3.8%; Score 7; DB 2; Length 292;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
|||||||
Db 196 PASSLSS 202

RESULT 23

I47161
Ig gamma 3 chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47161
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47161
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03781; NID:G433127; PIDN:AAA52219.1; PID:G433128
C;Genetics:
A;Gene: IgG3

C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 72 PASSLSS 78
|||||
|

RESULT 24
I47158
Ig gamma 1 chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47158
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47158
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03778; NID:G433121; PIDN:AAA52216.1; PID:G433122
C;Genetics:
A;Gene: IGG1
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 72 PASSLSS 78
|||||
|

RESULT 25
I47160
Ig gamma 2b chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47160
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47160
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03780; NID:G433125; PIDN:AAA52218.1; PID:G433126
C;Genetics:
A;Gene: IGG2b
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 72 PASSLSS 78
|||||
|

RESULT 26
I47159
Ig gamma 2a chain constant region - pig (fragment)

C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47159
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47159
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03779; NID:G433123; PIDN:AAA52217.1; PID:G433124
C;Genetics:
A;Gene: IGG2a
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 72 PASSLSS 78
|||||
|

RESULT 27
T51897
related to sorbitol utilization protein soul [imported] - Neurospora crassa
N;Alternate names: protein B23111.90
C;Species: Neurospora crassa
C;Date: 20-Oct-2000 #sequence_revision 20-Oct-2000 #text_change 20-Oct-2000
C;Accession: T51897
R;Schulte, U.; Aign, V.; Hoheisel, J.; Brandt, P.; Fartmann, B.; Holland, R.; Nyakatura
submitted to the Protein Sequence Database, August 2000
A;Reference number: 225858
A;Accession: T51897
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-341 <SCH>
A;Cross-references: EMBL:AL391572; GSPDB:GN00116; NCSP:B23111.90
A;Experimental source: BAC clone B23111; strain OR74A
C;Genetics:
A;Gene: NCSP:B23111.90
A;Map position: 6
A;Introns: 208/2; 233/3; 307/1

Query Match 3.8%; Score 7; DB 2; Length 341;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 SSSLSSV 41
Db 57 SSSLSSV 63
|||||
|

RESULT 28
JS0571
transcription activator of lipase act - Pseudomonas sp.
C;Species: Pseudomonas sp.
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 21-Jul-2000
C;Accession: JQ1228; JS0571
R;Iizumi, T.; Nakamura, K.; Shimada, Y.; Sugihara, A.; Tominaga, Y.; Fukase, T.
Agric. Biol. Chem. 55, 2349-2357, 1991
A;Title: Cloning, nucleotide sequencing, and expression in Escherichia coli of a lipase
A;Reference number: JT0579; MUID:92118328; PMID:1368739
A;Accession: JQ1228
A;Molecule type: DNA
A;Residues: 1-344 <IIZ>
A;Cross-references: GB:D10069; GB:D01216; NID:G216898; PIDN:BAA00961.1; PID:G216900
A;Note: the codons GTG for 15-, 20-, 28-, 51-, 64- and 96-Val and ATG for 1- and 30-Met
A;Note: the DNA sequence encoding this protein has eight possible translational start c
C;Comment: The gene encoding for this protein is located at downstream of lip gene.

C;Genetics:
A;Gene: act

Query Match 3.8%; Score 7; DB 2; Length 344;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 29

B39133
Lima protein - Pseudomonas cepacia
C;Species: Pseudomonas cepacia
C;Date: 27-Nov-1991 #sequence_revision 27-Nov-1991 #text_change 08-Oct-1999
C;Accession: B39133
R;Jorgensen, S.; Skov, K.W.; Diderichsen, B.
J. Bacteriol. 173, 559-567, 1991
A;Title: Cloning, sequence, and expression of a lipase gene from Pseudomonas cepacia: 11
A;Reference number: A39133; MUID:91100343; PMID:1987151
A;Accession: B39133
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-344 <JOR>
A;Cross-references: GB:M58494; NID:G557866; PIDN:AAA50467.1; PID:G151338

Query Match 3.8%; Score 7; DB 2; Length 344;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 30

S36249
lipB protein - Pseudomonas glumae
C;Species: Pseudomonas glumae
C;Date: 15-Oct-1994 #sequence_revision 15-Oct-1994 #text_change 08-Oct-1999
C;Accession: S36249
R;Franken, L.G.J.; Bos, J.W.; Visser, C.; Mueller, W.; Tommassen, J.; Verrips, C.T.
Mol. Microbiol. 9, 579-589, 1993
A;Title: An accessory gene, lipB, required for the production of active Pseudomonas glum
A;Reference number: S36248; MUID:94018652; PMID:8412704
A;Accession: S36249
A;Molecule type: DNA
A;Residues: 1-353 <FRE>
A;Cross-references: EMBL:X70354; NID:G49205; PIDN:CAA49813.1; PID:G49207
C;Genetics:
A;Gene: lipB
C;Keywords: transmembrane protein
F;19-40/Domain: transmembrane #status predicted <TM>

Query Match 3.8%; Score 7; DB 2; Length 353;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 281 LGPEAAA 287

RESULT 31

C87547
P-hydroxybenzoate hydroxylase [imported] - Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Date: 20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 10-May-2001
C;Accession: C87547
R;Niernan, W.C.; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J.
B.; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolch

n, J.; Ermolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.
Proc. Natl. Acad. Sci. U.S.A. 98, 4136-4141, 2001
A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Reference number: A87249; MUID:21173698; PMID:11259647

A;Accession: C87547
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-391 <STO>
A;Cross-references: GB:AB005673; NID:G13423943; PIDN:AAK24375.1; GSPDB:GN00148
C;Genetics:
A;Gene: CC2404
C;Superfamily: 4-hydroxybenzoate 3-monooxygenase

Query Match 3.8%; Score 7; DB 2; Length 391;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 247 LGPEAAA 253

RESULT 32

RERTK
renin (EC 3.4.23.15) precursor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 18-Jun-1999
C;Accession: A29991; S00923; S02090; A32702; A60837
R;Fukamizu, A.; Nishi, K.; Cho, T.; Saitoh, M.; Nakayama, K.; Ohkubo, H.; Nakanishi, S.
J. Mol. Biol. 201, 443-450, 1988
A;Title: Structure of the rat renin gene.
A;Reference number: A29991; MUID:88332979; PMID:3047403
A;Accession: A29991
A;Molecule type: DNA
A;Residues: 1-402 <FUK>
A;Cross-references: GB:X07907
R;Tada, M.; Fukamizu, A.; Seo, M.S.; Takahashi, S.; Murakami, K.
Nucleic Acids Res. 16, 3576, 1988
A;Title: Nucleotide sequence of rat renin cDNA.
A;Reference number: S00923; MUID:88233945; PMID:3287330
A;Accession: S00923

A;Molecule type: mRNA
A;Residues: 1-402 <TAD>
A;Cross-references: EMBL:X07033
A;Note: the authors translated the codon AAA for residue 98 as Leu
R;Murakami, K.

submitted to the EMBL Data Library, March 1988

A;Reference number: S02090
A;Accession: S02090
A;Molecule type: mRNA
A;Residues: 1-199, 'V', 201-270, 'L', 272-402 <MUR>
A;Cross-references: EMBL:X07033; NID:G57045; PIDN:CAA30082.1; PID:G57046
R;Burnham, C.E.; Hawelu-Johnson, C.L.; Frank, B.M.; Lynch, K.R.
Proc. Natl. Acad. Sci. U.S.A. 84, 5605-5609, 1987
A;Title: Molecular cloning of rat renin cDNA and its gene.
A;Reference number: A32702; MUID:87289653; PMID:3039496

A;Accession: A32702
A;Molecule type: mRNA
A;Residues: 1-402 <BUR>
A;Cross-references: GB:J02941
R;Makrides, S.C.; Mulinari, R.; Zannis, V.I.; Gavras, H.
Hypertension 12, 405-410, 1988
A;Title: Regulation of renin gene expression in hypertensive rats.
A;Reference number: A60837; MUID:89007008; PMID:3049341

A;Accession: A60837

A;Status: not compared with conceptual translation

A;Molecule type: mRNA

A;Residues: 308-402 <MAX>

R;Kim, S.; Hosoi, M.; Kikuchi, N.; Yamamoto, K.

J. Biol. Chem. 266, 7044-7050, 1991

A;Title: Amino-terminal amino acid sequence and heterogeneity in glycosylation of rat

A;Reference number: A39772; MUID:91201358; PMID:2016314

A;Contents: annotation; processing sites

C;Genetics:
A;Introns: 31/2; 81/3; 123/1; 162/3; 228/2; 268/2; 316/3; 349/3
C;Superfamily: pepsin
C;Keywords: aspartic proteinase; blood pressure control; glycoprotein; hydrolase; kidney
F;1-21/Domain: signal sequence #status predicted <SIG>
F;22-71/Domain: propeptide #status predicted <PRO>
F;72-352/Product: renin heavy chain #status experimental <MATH>
F;355-402/Product: renin light chain #status experimental <MATH>
F;69,139,320/Binding site: carboxylate (Asn) (covalent) #status predicted
F;102,287/Active site: Asp #status predicted
F;115-122,278-282,321-358/Dissulfide bonds: #status predicted

Query Match 3.8%; Score 7; DB 1; Length 402;
Best Local Similarity 100.0%; Pred. No. 75;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 27 SCSPSLP 33
Db 17 SCSPSLP 23

RESULT 33
A38340
66K glycoprotein precursor - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 20-Aug-1999
C;Accession: A38340
R;Sato, R.; Komine, Y.; Imanaka, T.; Takano, T.
J. Biol. Chem. 265, 21232-21236, 1990
A;Title: Monoclonal antibody EMR1a/212D recognizing site of deposition of extracellular
A;Reference number: A38340; MUID:91065939; PMID:1701177
A;Accession: A38340
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-475 <SAT>
A;Cross-references: GB:M55442; GB:J05688; NID:G165037; PIDN:AAA31258.1; PID:G165038
C;Superfamily: vitronectin; hemopexin repeat homology; somatomedin B homology
C;Keywords: glycoprotein
F;20-62/Domain: somatomedin B homology <SBH>
F;288-469/Domain: hemopexin repeat homology <PX2>

Query Match 3.8%; Score 7; DB 2; Length 475;
Best Local Similarity 100.0%; Pred. No. 86;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLWV 23
Db 10 LALLLWV 16

RESULT 34
T40330
hypothetical protein SPBC3B8.10c - fission yeast (Schizosaccharomyces pombe)
C;Species: Schizosaccharomyces pombe
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999
C;Accession: T40330
R;Lyne, M.; Rajandream, M.A.; Barrell, B.G.; Beck, A.; Reinhardt, R.; Pohl, T.
submitted to the EMBL Data Library, March 1998
A;Reference number: Z21921
A;Accession: T40330
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-476 <LYN>
A;Cross-references: EMBL:AL022244; PIDN:CAA18299.1; GSPDB:GN00067; SPDB:SPBC3B8.10c
A;Experimental source: strain 972h-; cosmid c3B8
C;Genetics:
A;Gene: SPDB:SPBC3B8.10c
A;Map position: 2

Query Match 3.8%; Score 7; DB 2; Length 476;
Best Local Similarity 100.0%; Pred. No. 87;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASLSSL 40
Db 54 ASLSSL 60

RESULT 35
A47222
Kallmann syndrome protein homolog KAL - quail
C;Species: Phasianidae gen. sp. (quail)
C;Date: 24-Feb-1994 #sequence_revision 25-Apr-1997 #text_change 19-Feb-1999
C;Accession: A47222
R;Legouis, R.; Cohen-Salmon, M.; del Castillo, I.; Levilliers, J.; Capy, L.; Mornow, J.
Genomics 17, 516-518, 1993
A;Title: Characterization of the chicken and quail homologues of the human gene respons
A;Reference number: A47222; MUID:94010957; PMID:8406507
A;Accession: A47222
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-674 <LEG>
A;Cross-references: GB:L13976; NID:G1196807; PID:G1196808
A;Note: sequence extracted from NCBI backbone (NCBIP:137995)
A;Note: the species of quail is not identified
C;Superfamily: antileukoproteinase repeat homology
F;124-170/Domain: antileukoproteinase repeat homology <ALP>

Query Match 3.8%; Score 7; DB 2; Length 674;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLWV 23
Db 10 LALLLWV 16

RESULT 36
B47222
Kallmann syndrome protein homolog KAL - chicken
C;Species: Gallus gallus (chicken)
C;Date: 24-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 01-Dec-2000
C;Accession: B47222; A47394; S36170
R;Legouis, R.; Cohen-Salmon, M.; del Castillo, I.; Levilliers, J.; Capy, L.; Mornow, J.
Genomics 17, 516-518, 1993
A;Title: Characterization of the chicken and quail homologues of the human gene respons
A;Reference number: A47222; MUID:94010957; PMID:8406507
A;Accession: B47222
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-676 <LEG>
A;Cross-references: GB:L12144; NID:G406510; PIDN:AA51435.1; PID:G406511
A;Note: sequence extracted from NCBI backbone (NCBIP:137996)
R;Legouis, R.; Llievre, C.A.; Leibovici, M.; Lapointe, F.; Petit, C.
Proc. Natl. Acad. Sci. U.S.A. 90, 2461-2465, 1993
A;Title: Expression of the KAL gene in multiple neuronal sites during chicken developme
A;Reference number: A47394; MUID:93211981; PMID:8460158
A;Accession: A47394
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 81-152,'P',154-237 <LE2>
A;Experimental source: embryo, olfactory bulb
A;Note: sequence extracted from NCBI backbone (NCBIN:128286, NCBIP:128287)
R;Rugarli, E.I.; Lutz, B.; Kuratani, S.C.; Wawersik, S.; Borsani, G.; Ballabio, A.; Eic
Nature Genet. 4, 19-26, 1993
A;Title: Expression pattern of the Kallmann syndrome gene in the olfactory system sugge
A;Reference number: S36170; MUID:93291868; PMID:8513320
A;Accession: S36170
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 'MVR',5-528,'H',530-676 <RUG>
C;Superfamily: antileukoproteinase repeat homology
F;125-171/Domain: antileukoproteinase repeat homology <ALP>

Query Match 3.8%; Score 7; DB 2; Length 676;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;


```
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 17 LALLLWV 23
Db 11 LALLLWV 17

RESULT 37
AE0033
secretion system apparatus protein [imported] - Yersinia pestis (strain CO92)
C:Species: Yersinia pestis
C:Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Nov-2001
C:Accession: AE0033
R:Parkhill, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B.;
deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.;
ili, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell,
Nature 413, 523-527, 2001
A:Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A:Reference number: AB0001; MUID:21470413; PMID:11586360
A:Accession: AE0033
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-682 <KUR>
A:Cross-references: GB:AL590842; PIDN:CAC89128.1; PID:g15978366; GSPDB:GN00175
C:Genetics:
A:Gene: YPO0266
C:Superfamily: regulatory protein lcrD

Query Match 3.8%; Score 7; DB 2; Length 682;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 89 LPPDSL 95
Db 417 LPPDSL 423

RESULT 38
A48562
coat protein - San Miguel sea lion virus (serotype 1)
N:Alternate names: capsid protein
C:Species: San Miguel sea lion virus
C:Date: 17-Feb-1994 #sequence_revision 17-Feb-1994 #text_change 23-Jul-1999
C:Accession: A48562
R:Neill, J.D.
Virus Res. 24, 211-222, 1992
A:Title: Nucleotide sequence of the capsid protein gene of two serotypes of San Miguel s
eins.
A:Reference number: A48562; MUID:92410750; PMID:1529644
A:Accession: A48562
A:Molecule type: genomic RNA
A:Residues: 1-702 <NEI>
A:Cross-references: GB:M87481; NID:G334882; PIDN:AA16217.1; PID:G334884
A>Note: sequence extracted from NCBI backbone (NCBIN:113564, NCBIIP:113565)
C:Superfamily: feline calicivirus coat protein
C:Keywords: capsid protein; coat protein; glycoprotein
F:208,481,493,545/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 3.8%; Score 7; DB 1; Length 702;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 89 LPPDSL 95
Db 635 LPPDSL 641

RESULT 39
S45262
NF-AT component - human
C:Species: Homo sapiens (man)
C:Date: 10-Dec-1994 #sequence_revision 10-Nov-1995 #text_change 28-May-1999
C:Accession: S45262
```

```
R:Northrop, J.P.; Ho, S.N.; Chen, L.; Thomas, D.J.; Timmerman, L.A.; Nolan, G.P.; Admon;
Nature 369, 497-502, 1994
A:Title: NF-AT components define a family of transcription factors targeted in T-cell ;
A:Reference number: S45262; MUID:94261186; PMID:8202141
A:Accession: S45262
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-716 <NOR>
A:Cross-references: GB:U08015; NID:G500631; PIDN:AA19601.1; PID:G500632

Query Match 3.8%; Score 7; DB 2; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 40
JC5805
transcription factor NFATc - mouse
C:Species: Mus musculus (house mouse)
C:Date: 27-Jan-1998 #sequence_revision 13-Mar-1998 #text_change 07-May-1999
C:Accession: JC5805
R:Pan, S.; Koyano-Nakagawa, N.; Tsuruta, L.; Amasaki, Y.; Yokota, T.; Mori, S.; Arai, J
Biochem. Biophys. Res. Commun. 240, 314-323, 1997
A:Title: Molecular cloning and functional characterization of murine cDNA encoding tra
A:Reference number: JC5805; MUID:98049829; PMID:9388475
A:Accession: JC5805
A:Molecule type: mRNA
A:Residues: 1-718 <PAN>
A>Note: the sequences of residues 30-39 and 40-59 are interchanged in the authors' tra
C:Comment: This protein plays a role in immune and inflammatory response by regulating
F:202-211,236-245,281-290/Region: SP-box
F:684-687/Region: nuclear location signal

Query Match 3.8%; Score 7; DB 2; Length 718;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 33 PASSLSS 39
Db 176 PASSLSS 182

RESULT 41
T09672
ent-kaurene synthase B (SC 2.5.1.-) - winter squash
C:Species: Cucurbita maxima (winter squash)
C:Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000
C:Accession: T09672
R:Yamaguchi, S.; Saito, T.; Abe, H.; Yamane, H.; Murofushi, N.; Kamiya, Y.
Plant J. 10, 203-213, 1996
A:Title: Molecular cloning and characterization of a cDNA encoding the gibberellin bio
A:Reference number: Z16814; MUID:96367664; PMID:8771778
A:Accession: T09672
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-789 <YAM>
A:Cross-references: EMBL:U43904; NID:G1431869; PIDN:AAB39482.1; PID:G1431870
A:Experimental source: immature seeds
C:Function:
A:Description: catalyzes the conversion of copalyl diphosphate to ent-kaurene
A:Pathway: gibberellin biosynthesis
A>Note: terpene cyclase
C:Keywords: transferase

Query Match 3.8%; Score 7; DB 2; Length 789;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 73 FKEIRS 79
```

Db 294 FKBEIRS 300
|||||

RESULT 42

AF2235
hypothetical protein alr3437 [imported] - Nostoc sp. (strain PCC 7120)
C;Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C;Accession: AF2235
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi, Nakazaki, N.; Shimpou, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S. DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Anabaena PCC 7120
A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Accession: AF2235
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-791 <KUR>
A;Cross-references: GB:BA000019; PIDN:BA075136.1; PID:gl7132570; GSPDB:GN00179
A;Experimental source: strain PCC 7120
C;Genetics:
A;Gene: alr3437

Query Match 3.8%; Score 7; DB 2; Length 791;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 142 ERVLRKT 148
|||||
Db 82 ERVLRKT 88

RESULT 43

C82726
DNA uptake protein XF1078 [imported] - Xylella fastidiosa (strain 9a5c)
C;Species: Xylella fastidiosa
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 20-Aug-2000
C;Accession: C82726
R;anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequencing
Nature 406, 151-157, 2000
A;Title: The genome sequence of the plant pathogen Xylella fastidiosa.
A;Reference number: A82515; MUID:20365717; PMID:10910347
A;Note: for a complete list of authors see reference number A59328 below
A;Accession: C82726
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-836 <SIM>
A;Cross-references: GB:AE003944; GB:AE003849; NID:g9106023; PIDN:AAF83888.1; GSPDB:GN001
A;Experimental source: strain 9a5c
R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrier, H. as-Neto, E.; Docena, C.; El-Dorri, H.; Facincani, A.P.; Ferreira, A.J.S. submitted to GenBank, June 2000
A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigret, Chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, H. A;Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A. Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak A;Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silveira M.; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z A;Reference number: A59328
A;Contents: annotation
C;Genetics:
A;Gene: XF1078

Query Match 3.8%; Score 7; DB 2; Length 836;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 WLALLW 22

Db 537 WLALLW 543
|||||

RESULT 44

D88465
protein B0244.7 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 10-May-2001
C;Accession: D88465
R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biology
A;Reference number: A75000; MUID:99069613; PMID:9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www.sanger.ac.uk/projects/C_el
A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; an
A;Accession: D88465
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-863 <STO>
A;Cross-references: GB:chr III; PIDN:AAA68378.1; PID:g861358; GSPDB:GN000021; CESP:B0244
A;Note: weak similarity to G-protein coupled receptors
C;Genetics:
A;Gene: B0244.7
A;Map position: 3

Query Match 3.8%; Score 7; DB 2; Length 863;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 LLLWVSA 25
|||||
Db 170 LLLWVSA 176

RESULT 45

T00358
hypothetical protein KIAA0684 - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 01-Feb-1999 #sequence_revision 01-Feb-1999 #text_change 11-Jan-2002
C;Accession: T00358
R;Ishikawa, K.; Nagase, T.; Suyama, M.; Miyajima, N.; Tanaka, A.; Kotani, H.; Nomura, N. DNA Res. 5, 169-176, 1998
A;Title: Prediction of the coding sequences of unidentified human genes. X. The complet
A;Reference number: Z14142; MUID:98403880; PMID:9734811
A;Accession: T00358
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-903 <ISH>
A;Cross-references: EMBL:AB014584; NID:d1204339; PIDN:BAA31659.1
A;Experimental source: brain; clone HK02956
C;Genetics:
A;Note: KIAA0684

Query Match 3.8%; Score 7; DB 2; Length 903;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||||
Db 164 ASSLSL 170

RESULT 46

T06576
probable protein kinase TCTR2 - tomato
C;Species: Lycopersicon esculentum (tomato)
C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 08-Oct-1999
C;Accession: T06576
R;Hackett, R.M.
submitted to the EMBL Data Library, March 1998
A;Reference number: Z15770
A;Accession: T06576

A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-982 <HAC>
A;Cross-references: EMBL:AJ005077; NID:e1296722; PIDN:CAA06334.1; PID:e1296723
A;Experimental source: cultivar Ailsa Craig
C;Genetics:
A;Gene: TCTR2

Query Match 3.8%; Score 7; DB 2; Length 982;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
|||||||
Db 29 PASSLSS 35

RESULT 47
T32986
hypothetical protein C05D2.6 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T32986
R;Du, Z.
Submitted to the EMBL Data Library, February 1998
A;Description: The sequence of C. elegans cosmid C05D2.
A;Reference number: Z21260
A;Accession: T32986
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-1008 <DUZ>
A;Cross-references: EMBL:AF047651; PIDN:AAC02723.1; GSPDB:GN00021; CESP:C05D2.6
A;Experimental source: strain Bristol N2; clone C05D2
C;Genetics:
A;Gene: CESP:C05D2.6
A;Map position: 3
A;Introns: 23/1; 53/3; 141/1; 231/3; 307/3; 325/2; 420/1; 456/3; 499/3; 522/2; 594/1; 75

Query Match 3.8%; Score 7; DB 2; Length 1008;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 129 ICASASA 135
|||||||
Db 676 ICASASA 682

RESULT 48
H86438
protein T19E23.7 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
C;Accession: H86438
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso,
Chin, C.W.; Chung, M.X.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.;
ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, B.; Kim, C.
C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali,
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon,
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Accession: H86438
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-1014 <STO>
A;Cross-references: GB:AE005172; NID:g6692120; PIDN:AAF24585.1; GSPDB:GN00141
C;Genetics:
A;Gene: T19E23.7
A;Map position: 1

Query Match 3.8%; Score 7; DB 2; Length 1014;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||||||
Db 987 ASSLSL 993

RESULT 49
T05050
protein kinase homolog M3E9.30 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 20-Sep-1999
C;Accession: T05050
R;Bevan, M.; Vandenbol, M.; Jallet, C.; Portetelle, D.; Hoheisel, J.; Mewes, H.W.; Mayr
submitted to the Protein Sequence Database, March 1999
A;Reference number: Z15396
A;Accession: T05050
A;Molecule type: DNA
A;Residues: 1-1029 <BEV>
A;Cross-references: EMBL:AL022223
A;Experimental source: cultivar Columbia; BAC clone M3E9
C;Genetics:
A;Map position: 4
A;Introns: 428/2; 862/2
A;Note: M3E9.30
C;Superfamily: protein kinase Xa21; leucine-rich alpha-2-glycoprotein repeat homology;

Query Match 3.8%; Score 7; DB 2; Length 1029;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 110 PVEIFRL 116
|||||||
Db 134 PVEIFRL 140

RESULT 50
C69048
cobalamin biosynthesis protein N - Methanobacterium thermoautotrophicum (strain Delta 1
C;Species: Methanobacterium thermoautotrophicum
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 08-Oct-1999
C;Accession: C69048
R;Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.;
; Qiu, D.; Spadafora, R.; Vicair, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwan, I
ki, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N.
J. Bacteriol. 179, 7135-7155, 1997
A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: funk
A;Reference number: A69000; MUID:98037514; PMID:9371463
A;Accession: C69048
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-1329 <MTH>
A;Cross-references: GB:AE000899; GB:AE000666; NID:g2622468; PIDN:AAB85840.1; PID:g26224
A;Experimental source: strain Delta H
C;Genetics:
A;Gene: MTH1363
A;Start codon: TTG
C;Superfamily: Rhodobacter capsulatus magnesium-protoporphyrin O-methyltransferase

Query Match 3.8%; Score 7; DB 2; Length 1329;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 161 TPDLVQD 167
|||||||
Db 1111 TPDLVQD 1117

Search completed: June 14, 2004, 08:08:46
Job time : 21 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 08:01:56 ; Search time 18 Seconds
(without alignments)
526.487 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPQLGPEAAALRPGWLALL.....DLVQDCHQGQRELKFLCMLR 182

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 141681 seqs, 52070155 residues

Word size : 0
Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : SwissProt_42:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	10	5.5	530	1	TP6B SULSH
2	8	4.4	271	1	YM35_MYCTU
3	7	3.8	111	1	QR15 YEAST
4	7	3.8	118	1	DSR4_HUMAN
5	7	3.8	219	1	NUD5_HUMAN
6	7	3.8	223	1	GTX1_TOBAC
7	7	3.8	257	1	DCH_THAAR
8	7	3.8	259	1	YCB_C_ECOLI
9	7	3.8	266	1	NAGB_VIBCH
10	7	3.8	266	1	NAGB_VIBPA
11	7	3.8	266	1	NAGB_VIBVU
12	7	3.8	267	1	NAGB_PASMU
13	7	3.8	270	1	NAGB_HAEIN
14	7	3.8	274	1	RPNC_YEAST
15	7	3.8	319	1	YS97_CAEEL
16	7	3.8	344	1	LIC1_BURCE
17	7	3.8	344	1	LIC2_BURCE
18	7	3.8	344	1	LICH_PSES5
19	7	3.8	353	1	LICH_PSEGL
20	7	3.8	398	1	TBX1_HUMAN
21	7	3.8	402	1	RENI_RAT
22	7	3.8	424	1	HEM1_BORBR
23	7	3.8	424	1	HEM1_BORPA
24	7	3.8	424	1	HEM1_BORPE
25	7	3.8	475	1	VTNC_RABIT
26	7	3.8	676	1	KALM_CHICK
27	7	3.8	695	1	DVL1_MOUSE
28	7	3.8	695	1	DVL1_RAT
29	7	3.8	702	1	COAT_SMSV1
30	7	3.8	717	1	NFC1_MOUSE
31	7	3.8	801	1	BRD2_HUMAN
32	7	3.8	822	1	NFC1_PIG
33	7	3.8	905	1	HEX_ADECC
					O05207 sulfolobus
					Q10517 mycobacteri
					P32344 saccharomyc
					P56555 homo sapien
					Q9ukkg homo sapien
					Q03662 nicotiana t
					O87873 thauera aro
					P36565 escherichia
					Q9kks5 vibrio chol
					Q87k60 vibrio para
					Q8d4t9 vibrio vuln
					Q9cmf4 pasteurella
					P44538 haemophilus
					P32496 saccharomyc
					Q09966 caenorhabdi
					P22089 burkholderi
					Q9zem5 burkholderi
					P25276 pseudomonas
					Q05490 pseudomonas
					O43435 homo sapien
					P08424 rattus norv
					Q7wqf0 bordetella
					Q7wce4 bordetella
					Q7vry3 bordetella
					P22458 oryctolagus
					P33005 gallus gall
					P51141 mus musculu
					Q9wvb9 rattus norv
					P36284 san miguel
					O88942 mus musculu
					P25440 homo sapien
					O77638 sus scrofa
					Q65955 canine aden

RESULT 1

ALIGNMENTS

34	7	3.8	905	1	HEX_ADECR	O39619 canine aden
35	7	3.8	943	1	NFC1_HUMAN	O95644 homo sapien
36	7	3.8	1052	1	CLMN_MOUSE	Q8C5W0 mus musculu
37	7	3.8	1163	1	RTN4_RAT	Q9jkl1 rattus norv
38	7	3.8	1192	1	RTN4_HUMAN	Q9nqc3 homo sapien
39	7	3.8	1302	1	UB4B_HUMAN	O95155 homo sapien
40	7	3.8	1433	1	REST_CHICK	O42184 gallus gall
41	6	3.3	67	1	ATP8_EQUAS	P92479 equus asinu
42	6	3.3	76	1	VE5_HPV58	P26552 human papil
43	6	3.3	89	1	NTP1_SPVKA	Q08513 swinepox vi
44	6	3.3	114	1	YHT8_YEAST	P38841 saccharomyc
45	6	3.3	120	1	VG19_BPMU	Q38646 bacterioph
46	6	3.3	125	1	NUIM_ARBLI	Q33756 arabacia lix
47	6	3.3	126	1	SYGB_NEIGO	Q50945 neisseria g
48	6	3.3	129	1	VL32_FOWPV	P15914 fowlpox vir
49	6	3.3	130	1	ECC1_HALEL	Q9zeu6 halomonas e
50	6	3.3	130	1	FLHE_SALTY	P40728 salmonella
51	6	3.3	130	1	YJ84_YEAST	P47151 saccharomyc
52	6	3.3	131	1	CRCB_METKA	Q8tw26 methanopyru
53	6	3.3	138	1	YJH5_YEAST	P47036 saccharomyc
54	6	3.3	141	1	HBA_MONDO	Q8hy34 monodelphis
55	6	3.3	141	1	X_WHVI	P03167 woodchuck h
56	6	3.3	147	1	PHIT_HUMAN	P49789 homo sapien
57	6	3.3	157	1	EGD1_YEAST	Q02642 saccharomyc
58	6	3.3	157	1	HES2_RAT	P35429 rattus norv
59	6	3.3	157	1	XY52_PSEPU	Q05092 pseudomonas
60	6	3.3	161	1	CRAA_ELERU	P82530 elephantulu
61	6	3.3	161	1	CRAA_TRIIN	P02500 trichechus
62	6	3.3	164	1	IPYR_BACP3	P19514 bacillus ps
63	6	3.3	164	1	IPYR_BACST	O05724 bacillus st
64	6	3.3	170	1	CRAA_BRAVA	P02487 bradypus va
65	6	3.3	170	1	CRAA_CHOHO	P02486 choloepus h
66	6	3.3	170	1	CRAA_TAMME	P02485 tamandua me
67	6	3.3	172	1	CRAA_MACMU	P02488 macaca mula
68	6	3.3	173	1	CRAA_ARTJA	P02482 artibeus ja
69	6	3.3	173	1	CRAA_BALAC	P02474 balaenopter
70	6	3.3	173	1	CRAA_BOVIN	P02470 bos taurus
71	6	3.3	173	1	CRAA_CAMDR	P02472 camelus dro
72	6	3.3	173	1	CRAA_CANFA	P02473 canis famil
73	6	3.3	173	1	CRAA_CAVPO	P02491 cavia porce
74	6	3.3	173	1	CRAA_EULFU	P02494 eulemur ful
75	6	3.3	173	1	CRAA_GIRCA	P02471 giraffa cam
76	6	3.3	173	1	CRAA_HUMAN	P02489 homo sapien
77	6	3.3	173	1	CRAA_LOXAF	P02498 loxodonta a
78	6	3.3	173	1	CRAA_MANJA	P02484 manis javan
79	6	3.3	173	1	CRAA_MOUSE	P02490 mus musculu
80	6	3.3	173	1	CRAA_MUSVI	P02483 mustela vis
81	6	3.3	173	1	CRAA_OCHPR	P02492 ochotona pr
82	6	3.3	173	1	CRAA_ORYAF	P02501 orycteropus
83	6	3.3	173	1	CRAA_PERPO	P02495 perodicticu
84	6	3.3	173	1	CRAA_PHOPH	P02477 phocoenoide
85	6	3.3	173	1	CRAA_PIG	P02475 sus scrofa
86	6	3.3	173	1	CRAA_PROCA	P02499 procavia ca
87	6	3.3	173	1	CRAA_PTEPO	P82531 pteropus po
88	6	3.3	173	1	CRAA_RABIT	P02493 oryctolagus
89	6	3.3	173	1	CRAA_SPAEH	Q64211 spalax leuc
90	6	3.3	173	1	CRAA_URSUR	P02480 ursus ursin
91	6	3.3	173	1	CRAA_ZALCA	P02481 zalophus ca
92	6	3.3	178	1	ATPD_BACCA	P41011 bacillus ca
93	6	3.3	179	1	ATPD_BACP3	P09220 bacillus ps
94	6	3.3	185	1	ATPD_GUITH	O78476 guillardia
95	6	3.3	185	1	DCRB_ECOLI	P37620 escherichia
96	6	3.3	186	1	THM2_ARATH	Q9seu8 arabidopsis
97	6	3.3	193	1	YKU2_YEAST	P36042 saccharomyc
98	6	3.3	196	1	CRA2_MESAU	P02497 mesocricetu
99	6	3.3	196	1	CRA2_MOUSE	P24622 mus musculu
100	6	3.3	196	1	CRA2_RAT	P24623 rattus norv

```
TP6B SULSH
ID TP6B SULSH STANDARD; PRT; 530 AA.
AC Q05207;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Type II DNA topoisomerase VI subunit B (EC 5.99.1.3) (TopoVI-B).
GN TOP6B.
OS Sulfolobus shibatae.
OC Archaea; Crenarchaeota; Thermoprotei; Sulfolobales; Sulfolobaceae;
OC Sulfolobus.
OX NCBI_TaxID=2286;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 492-506.
RC STRAIN=ATCC 51178 / DSM 5389 / B12;
RX MEDLINE=97238698; PubMed=9121560;
RA Bergerat A., de Massy B., Gabelle D., Varoutas P.-C., Nicolas A.,
RA Forterre P.;
RT "An atypical topoisomerase II from Archaea with implications for
RT meiotic recombination.";
RL Nature 386:414-417(1997).
RN [2]
RP X-RAY CRYSTALLOGRAPHY (2.00 ANGSTROMS) OF 2-470.
RX MEDLINE=22393013; PubMed=12505993;
RA Corbett K.D., Berger J.M.;
RT "Structure of the topoisomerase VI-B subunit: implications for type
RT II topoisomerase mechanism and evolution.";
RL EXBO J. 22:151-163(2003).
CC -!- FUNCTION: Relaxes both positive and negative superturns and
CC exhibits a strong decatenase activity. The B subunit binds ATP.
CC -!- CATALYTIC ACTIVITY: ATP-dependent breakage, passage and rejoining
CC of double-stranded DNA.
CC -!- SUBUNIT: Heterotetramer of two subunits A and two subunits B.
CC -!- SIMILARITY: Belongs to the TOP6B family.
CC
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC -----
DR EMBL; Y10582; CAA71604.1; -.
DR PDB; 1MU5; 07-JAN-03.
DR PDB; 1MX0; 07-JAN-03.
DR HAMAP; MF_03222; -.
DR InterPro; IPR003594; ATPbind ATPase.
DR InterPro; IPR005734; DNA_top6B.
DR Pfam; PF02518; HATPase_C; 1.
DR SMART; SM00387; HATPase_C; 1.
DR TIGRFAMs; TIGR01052; top6b; 1.
KW Isomerase; Topoisomerase; DNA-binding; ATP-binding; 3D-structure.
SQ SEQUENCE 530 AA; 60527 MW; 772F221FCD28441A CRC64;
Query Match 5.5%; Score 10; DB 1; Length 530;
Best Local Similarity 100.0%; Pred. No. 0.042;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 116 LVSKYQNEIS 125
Db 493 LVSKYQNEIS 502
RESULT 2
YM35 MYCTU STANDARD; PRT; 271 AA.
ID YM35 MYCTU
AC Q10517;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Hypothetical protein RV2235/MT2294/MB2259.
GN RV2235 OR MT2294 OR MTCY427.16 OR MB2259.
```

```
OS Mycobacterium tuberculosis, and
OS Mycobacterium bovis.
OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Mycobacteriaceae; Mycobacterium.
OX NCBI_TaxID=1773, 1765;
RN [1]
RP SEQUENCE FROM N.A.
RC SPECIES=M.tuberculosis; STRAIN=H37Rv;
RX MEDLINE=98295987; PubMed=9634230;
RA Cole S.T., Brosch R., Parkhill J., Garnier T., Churcher C., Harris D.,
RA Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekala F.,
RA Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
RA Davies R., Devlin K., Feltwell T., Gentles S., Hamlin N., Holroyd S.,
RA Hornsby T., Jagels K., Krogh A., McLean J., Moule S., Murphy L.,
RA Oliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,
RA Rutter S., Seeger K., Skelton S., Squares S., Squares R.,
RA Sulston J.E., Taylor K., Whitehead S., Barrell B.G.;
RT "Deciphering the biology of Mycobacterium tuberculosis from the
RT complete genome sequence.";
RL Nature 393:537-544(1998).
RN [2]
RP SEQUENCE FROM N.A.
RC SPECIES=M.tuberculosis; STRAIN=CDC 1551 / Oshkosh;
RX MEDLINE=22206494; PubMed=12218036;
RA Fleischmann R.D., Alland D., Eisen J.A., Carpenter L., White O.,
RA Peterson J., DeBoy R., Dodson R., Gwinn M., Haft D., Hickey E.,
RA Kolonay J.F., Nelson W.C., Umayam L.A., Ermolaeva M., Salzberg S.L.,
RA Delcher A., Utterback T., Weidman J., Khouri H., Gill J., Mikula A.,
RA Bishai M., Jacobs W.R. Jr., Venter J.C., Fraser C.M.;
RT "Whole-genome comparison of Mycobacterium tuberculosis clinical and
RT laboratory strains.";
RL J. Bacteriol. 184:5479-5490(2002).
RN [3]
RP SEQUENCE FROM N.A.
RC SPECIES=M.bovis; STRAIN=AF2122/97;
RX MEDLINE=22709107; PubMed=12788972;
RA Garnier T., Eiglmeier K., Camus J.-C., Medina N., Mansoor H.,
RA Pryor M., Duthoy S., Grondin S., Lacroix C., Monsemp C., Simon S.,
RA Harris B., Atkin R., Doggett J., Mayes R., Keating L., Wheeler P.R.,
RA Parkhill J., Barrell B.G., Cole S.T., Gordon S.V., Hewinson R.G.;
RT "The complete genome sequence of Mycobacterium bovis.";
RL Proc. Natl. Acad. Sci. U.S.A. 100:7877-7882(2003).
CC -!- SUBCELLULAR LOCATION: Integral membrane protein (Potential).
CC -!- SIMILARITY: Belongs to the SURF1 family.
CC
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC -----
DR EMBL; Z70692; CAA94657.1; -.
DR EMBL; AE007074; AAK46578.1; -.
DR EMBL; BX248341; CAD97112.1; -.
DR PIR; G70777; G70777.
DR TIGR; MT2294; -.
DR TubercuList; RV2235; -.
DR InterPro; IPR002994; Surf1.
DR ProDom; PD024360; Surf1; 1.
DR PROSITE; PS50895; SURF1; 1.
KW Hypothetical protein; Transmembrane; Complete proteome.
FT TRANSMEM 11 33 POTENTIAL.
FT TRANSMEM 172 194 POTENTIAL.
FT TRANSMEM 214 236 POTENTIAL.
SQ SEQUENCE 271 AA; 29762 MW; A875AC1CB7B7D161 CRC64;
Query Match 4.4%; Score 8; DB 1; Length 271;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 12 LRPGWLAL 19
```

Db 8 LRPGWLAL 15

|||||

RESULT 3

QRI5_YEAST STANDARD; PRT; 111 AA.

AC P32344;

DT 01-OCT-1993 (Rel. 27, Created)

DT 01-OCT-1993 (Rel. 27, Last sequence update)

DT 10-OCT-2003 (Rel. 42, Last annotation update)

DE QRI5 protein.

GN QRI5 OR YLR204W.

OS Saccharomyces cerevisiae (Baker's yeast).

OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;

OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.

OX NCBI_TaxID=4932;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=92397593; PubMed=1523888;

RA Simon M., della Seta F., Sor F., Faye G.;

RT "Analysis of the MSS51 region on chromosome XII of Saccharomyces cerevisiae.";

RL Yeast 8:559-567(1992).

RN [2]

RP SEQUENCE FROM N.A.

RC STRAIN=S288C / AB972;

RX MEDLINE=97313267; PubMed=9169871;

RA Johnston M., Hillier L., Riles L., Albermann K., Andre B., Ansonge M., Beres V., Brueckner M., Delius H., Dubois E., Duesterhoeft A., Entian K.-D., Floeth M., Goffeau A., Hebling U., Heumann K., Heuss-Neitzel D., Hilbert H., Hilger F., Kleine K., Koetter P., Louis E.J., Messenguy F., Mewes H.-W., Miosga T., Moestl D., Mueller-Auer S., Nentwich U., Obermaier B., Piravandi E., Pohl T.M., Portetelle D., Purnelle B., Rechmann S., Rieger M., Rinke M., Rose M., Scharfe M., Scherens B., Scholler P., Schwager C., Schwarz S., Underwood A.P., Urrestarazu L.A., Vandenbol M., Verhasselt P., Vierendeels F., Voet M., Volckaert G., Voss H., Wambutt R., Wedler E., Wedler H., Zimmermann F.K., Zollner A., Hani J., Hoheisel J.D.;

RT "The nucleotide sequence of Saccharomyces cerevisiae chromosome XII.";

RL Nature 387:87-90(1997).

RN [3]

RP SEQUENCE OF 1-60 FROM N.A.

RX MEDLINE=83129417; PubMed=6297789;

RA Faye G., Simon M.;

RT "Analysis of a yeast nuclear gene involved in the maturation of mitochondrial pre-messenger RNA of the cytochrome oxidase subunit I.";

RL Cell 32:77-87(1983).

CC

CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

CC

DR EMBL; J01487; AAA66925.1; -.

DR EMBL; S43721; AAB23217.1; -.

DR EMBL; U14913; AAB67429.1; -.

DR PIR; S25343; S25343.

DR GeneOnline; 142266; -.

DR SGD; S0004194; QRI5.

FT DOMAIN 82 111 ARG/LYS-RICH (BASIC).

SQ SEQUENCE 111 AA; 12772 MW; 5B25627D5B4C833D CRC64;

Query Match 3.8%; Score 7; DB 1; Length 111;

Best Local Similarity 100.0%; Pred. No. 11;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 LRPGWL 17

|||||

Db 5 ALRPGWL 11

RESULT 4

DSR4_HUMAN STANDARD; PRT; 118 AA.

AC P56555;

DT 15-JUL-1998 (Rel. 36, Created)

DT 15-JUL-1998 (Rel. 36, Last sequence update)

DT 16-OCT-2001 (Rel. 40, Last annotation update)

DE Down syndrome critical region protein 4 (Down syndrome critical region protein B).

GN DSCR4 OR DSCR3 OR DCRB.

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

OX NCBI_TaxID=9606;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Placenta;

RX MEDLINE=98116657; PubMed=9455479;

RA Nakamura A., Hattori M., Sakaki Y.;

RT "A novel gene isolated from human placenta located in Down syndrome critical region on chromosome 21.";

RL DNA Res. 4:321-324(1997).

CC -!- TISSUE SPECIFICITY: Mainly expressed in placenta.

CC

CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

CC

DR EMBL; AB000099; BAA25877.1; -.

DR Genew; HGNC:3045; DSCR4.

DR MIM; 604829; -.

SQ SEQUENCE 118 AA; 12955 MW; 97CE8D8A85F447BF CRC64;

Query Match 3.8%; Score 7; DB 1; Length 118;

Best Local Similarity 100.0%; Pred. No. 12;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 29 SFSLPAS 35

Db 59 SFSLPAS 65

|||||

RESULT 5

NUD5_HUMAN STANDARD; PRT; 219 AA.

AC Q9UKK9;

DT 28-FEB-2003 (Rel. 41, Created)

DT 28-FEB-2003 (Rel. 41, Last sequence update)

DT 10-OCT-2003 (Rel. 42, Last annotation update)

DE ADP-sugar pyrophosphatase YSA1H (EC 3.6.1.1-) {Nucleoside diphosphate-linked moiety X motif 5} (HSPC115).

GN NUDT5.

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

OX NCBI_TaxID=9606;

RN [1]

RP SEQUENCE FROM N.A., AND CHARACTERIZATION.

RX MEDLINE=20036310; PubMed=10567213;

RA Gami L., Cartwright J.L., McLennan A.G.;

RT "Cloning, expression and characterization of YSA1H, a human adenosine 5'-diphosphosugar pyrophosphatase possessing a MutT motif.";

RL Biochem. J. 344:331-337(1999).

RN [2]

RP SEQUENCE FROM N.A.

RC TISSUE=Blood;


```
RX MEDLINE=20499367; PubMed=11042152;
RA Zhang Q.-H., Ye M., Wu X.-Y., Ren S.-X., Zhao M., Zhao C.-J., Fu G.,
RA Shen Y., Fan H.-Y., Lu G., Zhong M., Xu X.-R., Han Z.-G., Zhang J.-W.,
RA Tao J., Huang Q.-H., Zhou J., Hu G.-X., Gu J., Chen S.-J., Chen Z.,
RT "Cloning and functional analysis of cDNAs with open reading frames for
RT 300 previously undefined genes expressed in CD34+ hematopoietic
RT stem/progenitor cells.";
RL Genome Res. 10:1546-1560(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- FUNCTION: Hydrolyzes with similar activities ADP-ribose and ADP-
CC mannose. Can also hydrolyzes ADP-glucose (56% of ADP-ribose
CC activity) and diadenosine diphosphate (20%).
CC -!- CATALYTIC ACTIVITY: ADP-ribose + H(2)O = AMP + D-ribose 5-
CC phosphate.
CC -!- SUBUNIT: Homodimer.
CC -!- TISSUE SPECIFICITY: Widely expressed.
CC -!- SIMILARITY: Belongs to the NUDIX hydrolase family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF155832; AAF06734.1; -.
CC EMBL; AF161464; AAF29079.1; -.
CC EMBL; BC030025; AAH00025.1; -.
CC Genew; HGNC:8052; NUDT5.
CC GO; GO:0005622; C:intracellular; NAS.
CC GO; GO:0019144; F:ADP-sugar diphosphatase activity; IDA.
CC GO; GO:0005515; F:protein binding; NAS.
CC GO; GO:0019303; P:D-ribose catabolism; NAS.
CC InterPro; IPR000086; NUDIX_hydrolase.
CC Pfam; PF00293; NUDIX; 1.
CC PRINTS; PR00502; NUDIXFAMILY.
CC PROSITE; PS00893; NUDIX; 1.
KW Hydrolase.
FT DOMAIN 97 118 NUDIX BOX.
SQ SEQUENCE 219 AA; 24327 MW; 6574E0BF1EA2B826 CRC64;
```

Query Match 3.8%; Score 7; DB 1; Length 219;
Best Local Similarity 100.0%; Pred. No. 21;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAAALR 13
Db 105 PEAAALR 111

```
RESULT 6
GTXL TOBAC
ID GTXL TOBAC STANDARD; PRT; 223 AA.
AC Q03662;
DT 01-OCT-1993 (Rel. 27, Created)
DT 01-OCT-1993 (Rel. 27, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Probable glutathione S-transferase (EC 2.5.1.18) (Auxin-induced
DE protein PGNT1/PCNT110).
OS Nicotiana tabacum (Common tobacco).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC Lamids; Solanales; Solanaceae; Nicotiana.
OX NCBI_TaxID=4097;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. White Burley, and cv. Samsun NN; TISSUE=Leaf;
RX MEDLINE=91322513; PubMed=1863770;
RA van der Zaal E.J., Droog F.N.J., Boot C.J.M., Hensgens L.A.M.,
RA Hoge J.H.C., Schilperoort R.A., Libbenga K.R.;
RT "Promoters of auxin-induced genes from tobacco can lead to auxin-
RT inducible and root tip-specific expression.";
RL Plant Mol. Biol. 16:983-998(1991).
CC -!- CATALYTIC ACTIVITY: RX + glutathione = HX + R-S-glutathione.
CC -!- TISSUE SPECIFICITY: Root tip-specific expression.
CC -!- INDUCTION: By auxin.
CC -!- SIMILARITY: Belongs to the GST superfamily. HSP26 family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; X56268; CAA39709.1; -.
CC EMBL; X56264; CAA39705.1; -.
CC PIR; S16267; S16267.
CC InterPro; IPR004046; GST_Cterm.
CC InterPro; IPR004045; GST_Nterm.
CC Pfam; PF00043; GST_C; 1.
CC Pfam; PF02798; GST_N; 1.
CC Transferase; Multigene family.
SQ SEQUENCE 223 AA; 25667 MW; 0B29A74FC15869BD CRC64;
```

Query Match 3.8%; Score 7; DB 1; Length 223;
Best Local Similarity 100.0%; Pred. No. 21;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 131 ASASAPK 137
Db 217 ASASAPK 223

```
RESULT 7
DCH THAAR
ID DCH THAAR STANDARD; PRT; 257 AA.
AC O87873;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Cyclohexa-1,5-dienecarbonyl-CoA hydratase (EC 4.2.1.100) (Cyclohexa-
DE 1,5-diene-1-carboxyl-CoA hydratase) (Dienoyl-CoA hydratase).
GN DCH.
OS Thauera aromatica.
OC Bacteria; Proteobacteria; Betaproteobacteria; Rhodocyclales;
OC Rhodocyclaceae; Thauera.
OX NCBI_TaxID=59405;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=98417440; PubMed=9746358;
```

```
RA Breese K., Boll M., Alt-Moerbe J., Schaeffer H., Fuchs G.;
RT "Genes coding for the benzoyl-CoA pathway of anaerobic aromatic
RT metabolism in the bacterium Thauera aromatica.";
RL Eur. J. Biochem. 256:148-154(1998).
RN [2]
RP SEQUENCE OF 1-20, AND CHARACTERIZATION.
RX MEDLINE=98409281; PubMed=9738901;
RA Laempe D., Eisenreich W., Bacher A., Fuchs G.;
RT "Cyclohexa-1,5-diene-1-carboxyl-CoA hydratase, an enzyme involved in
RT anaerobic metabolism of benzoyl-CoA in the denitrifying bacterium
RT Thauera aromatica.";
RL Eur. J. Biochem. 255:618-627(1998).
CC -!- FUNCTION: Catalyzes the hydration of cyclohexa-1,5-diene-1-
CC carboxyl-CoA.
CC -!- CATALYTIC ACTIVITY: Cyclohexa-1,5-dienecarbonyl-CoA + H(2)O = 6-
CC hydroxycyclohex-1-enecarbonyl-CoA.
CC -!- PATHWAY: Aromatic compounds metabolism via benzoyl-CoA.
CC -!- SIMILARITY: Belongs to the enoyl-CoA hydratase/isomerase family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AJ224959; CAA12246.1; -
DR InterPro; IPR001753; EnCoA_hydrase.
DR Pfam; PF00378; ECH; 1.
DR PROSITE; PS00166; ENOYL COA HYDRATASE; FALSE_NEG.
KW Lyase; Aromatic hydrocarbons catabolism.
FT INIT MET 0
FT SEQUENCE 257 AA; 27751 MW; 50FF4E61A868BF2C CRC64;
SQ
Query Match 3.8%; Score 7; DB 1; Length 257;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 7 PEAALR 13
Db 183 PEAALR 189
RESULT 8
YCBC_ECOLI STANDARD; PRT; 259 AA.
ID YCBC_ECOLI
AC P36565; P75846;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Hypothetical protein ybcC.
GN YCBC OR B0920 OR Z1267 OR ECS1003.
OS Escherichia coli, and
OS Escherichia coli O157:H7.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Escherichia.
OX NCBI_TaxID=562, 83334;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=K12 / MG1655;
RX MEDLINE=97426617; PubMed=9278503;
RA Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland V.,
RA Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F.,
RA Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J.,
RA Mau B., Shao Y.;
RT "The complete genome sequence of Escherichia coli K-12.";
RL Science 277:1453-1474(1997).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=K12;
RX MEDLINE=97061202; PubMed=8905232;
RA Oshima T., Aiba H., Baba T., Fujita K., Hayashi K., Honjo A.,
```

```
RA Ikemoto K., Inada T., Itoh T., Kajihara M., Kanai K., Kashimoto K.,
RA Kimura S., Kitagawa M., Makino K., Masuda S., Miki T., Mizobuchi K.,
RA Mori H., Motomura K., Nakamura Y., Nashimoto H., Nishio Y., Saito N.,
RA Sampei G., Seki Y., Tagami H., Takemoto K., Wada C., Yamamoto Y.,
RA Yano M., Horiuchi T.;
RT "A 718-kb DNA sequence of the Escherichia coli K-12 genome
RT corresponding to the 12.7-28.0 min region on the linkage map.";
RL DNA Res. 3:137-155(1996).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=O157:H7 / EDL933 / ATCC 700927;
RX MEDLINE=21374935; PubMed=11206551;
RA Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D.,
RA Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,
RA Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L.,
RA Grotbeck E.J., Davis N.W., Lim A., Dimailanta E.T., Potamousis K.,
RA Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,
RA Welch R.A., Blattner F.R.;
RT "Genome sequence of enterohaemorrhagic Escherichia coli O157:H7.";
RL Nature 409:529-533(2001).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=O157:H7 / RIMD 0509952;
RX MEDLINE=21156231; PubMed=11258796;
RA Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii K., Yokoyama K.,
RA Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka M., Tobe T.,
RA Iida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T.,
RA Kuhara S., Shiba T., Hattori M., Shinagawa H.;
RT "Complete genome sequence of enterohemorrhagic Escherichia coli
RT O157:H7 and genomic comparison with a laboratory strain K-12.";
RL DNA Res. 8:11-22(2001).
RN [5]
RP SEQUENCE OF 1-170 FROM N.A.
RC STRAIN=K12 / W3110;
RX MEDLINE=94232180; PubMed=7513784;
RA Feng J., Yamanaka K., Niki H., Ogura T., Hiraga S.;
RT "New killing system controlled by two genes located immediately
RT upstream of the mukB gene in Escherichia coli.";
RL Mol. Gen. Genet. 243:136-147(1994).
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AB000194; AAC74006.1; -
DR EMBL; D90730; BAA35666.1; -
DR EMBL; AB005281; AAG55405.1; -
DR EMBL; AP002553; BAB34426.1; -
DR EMBL; D26440; -; NOT_ANNOTATED_CDS.
DR PIR; A85618; A85618.
DR PIR; C90754; C90754.
DR PIR; G64831; G64831.
DR EcoGene; EGI2166; ybcC.
DR InterPro; IPR003848; DUF218.
DR Pfam; PF02698; DUF218; 1.
DR Hypothetical protein; Complete proteome.
FT CONFLICT 89 89 Y -> N (IN REF. 5).
FT CONFLICT 150 171 GVPREIITLDLPKDTETEEAAA -> ACRASKLSPWICQKI
FT CONFLICT 150 171 PKKIQ (IN REF. 5).
SQ SEQUENCE 259 AA; 28666 MW; 7EAB14C696DAA0C9 CRC64;
Query Match 3.8%; Score 7; DB 1; Length 259;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 15 GWLALLL 21
Db 46 GWLALLL 52
```

RESULT 9
NAGB_VIBCH STANDARD; PRT; 266 AA.
AC Q9KK55;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Glucosamine-6-phosphate deaminase (EC 3.5.99.6) (Glucosamine-6-phosphate isomerase) (GNPDA) (GLCN6P deaminase).
GN NAGB OR VCA1025.
CS Vibrio cholerae.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
OC Vibrionaceae; Vibrio.
OX NCBI_TaxID=666;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=El Tor N16961 / Serotype O1;
RX MEDLINE=20406833; PubMed=10952301;
RA Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwinn M.L.,
RA Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam L.A.,
RA Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson D.,
RA Brumlaeva M.D., Vamathevan J., Bass S., Qin H., Dragoi I., Sellers P.,
RA McDonald L., Utterback T., Fleischmann R.D., Nierman W.C., White O.,
RA Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J., Venter J.C.,
RA Fraser C.M.;
RT "DNA sequence of both chromosomes of the cholera pathogen Vibrio cholerae";
RL Nature 406:477-483(2000).
CC -!- FUNCTION: Catalyzes the reversible isomerization-deamination of glucosamine 6-phosphate (GlcN6P) to form fructose 6-phosphate (Fru6P) and ammonium ion (By similarity).
CC -!- CATALYTIC ACTIVITY: D-glucosamine 6-phosphate + H(2)O = D-fructose 6-phosphate + NH(3).
CC -!- ENZYME REGULATION: Allosterically activated by N-acetylglucosamine 6-phosphate (GlcNAc6P) (By similarity).
CC -!- PATHWAY: N-acetylglucosamine utilization.
CC -!- SUBUNIT: Homohexamer (By similarity).
CC -!- SIMILARITY: Belongs to the glucosamine/galactosamine-6-phosphate isomerase family. NagB subfamily.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AE004428; AAF96921.1; -;
CC HSP; P09375; IDEA.
CC TIGR; VCA1025; -;
CC HAMAP; MF_01241; -; 1.
CC InterPro; IPR006148; Gluc_gal_isom.
CC Pfam; PF01182; Glucosamine_iso; 1.
CC TIGRFAMs; TIGR00502; nagB; 1.
CC PROSITE; PS01161; GLC_GALNAC_ISOMERASE; 1.
KW Carbohydrate metabolism; Hydrolase; Allosteric enzyme;
KW Complete proteome.
FT ACT_SITE 72 72 GENERAL BASE CATALYZING THE GLCN6P ENOLIZATION STEP (BY SIMILARITY).
FT ACT_SITE 141 141 PART OF THE CATALYTIC TRIAD (BY SIMILARITY).
FT ACT_SITE 143 143 GENERAL BASE INVOLVED IN THE CATALYSIS OF THE RING-OPENING STEP OF GLCN6P; PART OF THE CATALYTIC TRIAD (BY SIMILARITY).
FT ACT_SITE 148 148 PART OF THE CATALYTIC TRIAD (BY SIMILARITY).
FT SITE 151 151 PART OF THE ALLOSTERIC SITE (BY SIMILARITY).
FT SITE 158 158 PART OF THE ALLOSTERIC SITE (BY SIMILARITY).

FT SITE 160 160 PART OF THE ALLOSTERIC SITE (BY SIMILARITY).
FT SITE 161 161 PART OF THE ALLOSTERIC SITE (BY SIMILARITY).
FT SITE 254 254 PART OF THE ALLOSTERIC SITE (BY SIMILARITY).
SQ SEQUENCE 266 AA; 29548 MW; A13B6611DE17213E CRC64;
Query Match 3.8%; Score 7; DB 1; Length 266;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 33 PASSLSS 39
DB 149 PASSLSS 155
RESULT 10
NAGB_VIBPA STANDARD; PRT; 266 AA.
AC Q87K60;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Glucosamine-6-phosphate deaminase (EC 3.5.99.6) (Glucosamine-6-phosphate isomerase) (GNPDA) (GLCN6P deaminase).
DE NAGB OR VPA0038.
GN Vibrio parahaemolyticus.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
OC Vibrionaceae; Vibrio.
OX NCBI_TaxID=670;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=RIMD 2210633 / Serotype O3:K6;
RX MEDLINE=22508454; PubMed=12620739;
RA Makino K., Oshima K., Kurokawa K., Yokoyama K., Uda T., Tagomori K., Iijima Y., Najima M., Nakano M., Yamashita A., Kubota Y., Kimura S., Yasunaga T., Honda T., Shinagawa H., Hattori M., Iida T.;
RT "Genome sequence of Vibrio parahaemolyticus: a pathogenic mechanism distinct from that of V. cholerae";
RL Lancet 361:743-749(2003).
CC -!- FUNCTION: Catalyzes the reversible isomerization-deamination of glucosamine 6-phosphate (GlcN6P) to form fructose 6-phosphate (Fru6P) and ammonium ion (By similarity).
CC -!- CATALYTIC ACTIVITY: D-glucosamine 6-phosphate + H(2)O = D-fructose 6-phosphate + NH(3).
CC -!- ENZYME REGULATION: Allosterically activated by N-acetylglucosamine 6-phosphate (GlcNAc6P) (By similarity).
CC -!- PATHWAY: N-acetylglucosamine utilization.
CC -!- SUBUNIT: Homohexamer; trimer of disulfide-linked dimers (By similarity).
CC -!- SIMILARITY: Belongs to the glucosamine/galactosamine-6-phosphate isomerase family. NagB subfamily.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AP005084; BAC61381.1; -;
CC HAMAP; MF_01241; -; 1.
CC InterPro; IPR006148; Gluc_gal_isom.
CC InterPro; IPR004547; NagB.
CC Pfam; PF01182; Glucosamine_iso; 1.
CC PROSITE; PS01161; GLC_GALNAC_ISOMERASE; 1.
KW Carbohydrate metabolism; Hydrolase; Allosteric enzyme;
KW Complete proteome.
FT ACT_SITE 72 72 GENERAL BASE CATALYZING THE GLCN6P ENOLIZATION STEP (BY SIMILARITY).
FT ACT_SITE 141 141 PART OF THE CATALYTIC TRIAD (BY

FT ACT_SITE 143 143
FT GENERAL BASE INVOLVED IN THE CATALYSIS OF
FT THE RING-OPENING STEP OF GLCN6P; PART OF
FT THE CATALYTIC TRIAD (BY SIMILARITY).
FT ACT_SITE 148 148
FT PART OF THE CATALYTIC TRIAD (BY
FT SIMILARITY).
FT SITE 151 151
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 158 158
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 160 160
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 161 161
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 254 254
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT DISULFID 219 219
FT INTERCHAIN (BY SIMILARITY).
FT SEQUENCE 266 AA; 29658 MW; 1C21AB748D0C5E07 CRC64;
SQ
Query Match 3.8%; Score 7; DB 1; Length 266;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 33 PASSLSS 39
DB 149 PASSLSS 155
RESULT 11
NAGB VIBVU STANDARD; PRT; 266 AA.
AC Q8D4T9;
DT 1C-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 1C-OCT-2003 (Rel. 42, Last annotation update)
DE Glucosamine-6-phosphate deaminase (EC 3.5.99.6) (Glucosamine-6-
DE phosphate isomerase) (GNPDA) (GlcN6P deaminase).
GN NAGB OR VV21200.
OS Vibrio vulnificus.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
OC Vibrionaceae; Vibrio.
OX NCBI_TaxID=672;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CMCP6;
RA Rhee J.H., Kim S.Y., Chung S.S., Kim J.J., Moon Y.H., Jeong H.,
RA Choy H.E.;
RT "Complete genome sequence of Vibrio vulnificus CMCP6";
RL Submitted (DEC-2002) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: Catalyzes the reversible isomerization-deamination of
CC glucosamine 6-phosphate (GlcN6P) to form fructose 6-phosphate
CC (Fru6P) and ammonium ion (By similarity).
CC -!- CATALYTIC ACTIVITY: D-glucosamine 6-phosphate + H(2)O = D-fructose
CC 6-phosphate + NH(3).
CC -!- ENZYME REGULATION: Allosterically activated by N-acetylglucosamine
CC 6-phosphate (GlcNAc6P) (By similarity).
CC -!- PATHWAY: N-acetylglucosamine utilization.
CC -!- SUBUNIT: Homohexamer (By similarity).
CC -!- SIMILARITY: Belongs to the glucosamine/galactosamine-6-phosphate
CC isomerase family. NagB subfamily.

This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
or send an email to license@isb-sib.ch).

EMBL; AE016812; AAO08097.1; -
DR HAMAP; MF_01241; -; 1.
DR InterPro; IPR006148; Gluc_gal_isom.
DR InterPro; IPR004547; NagB.

DR Pfam; PF01182; Glucosamine_iso; 1.
DR TIGRfams; TIGR00502; nagB; 1.
DR PROSITE; PS01161; GLC_GALNAC ISOMERASE; 1.
KW Carbohydrate metabolism; Hydrolase; Allosteric enzyme;
KW Complete proteome.
FT ACT_SITE 72 72
FT GENERAL BASE CATALYZING THE GLCN6P
FT ENOLIZATION STEP (BY SIMILARITY).
FT ACT_SITE 141 141
FT PART OF THE CATALYTIC TRIAD (BY
FT SIMILARITY).
FT ACT_SITE 143 143
FT GENERAL BASE INVOLVED IN THE CATALYSIS OF
FT THE RING-OPENING STEP OF GLCN6P; PART OF
FT THE CATALYTIC TRIAD (BY SIMILARITY).
FT ACT_SITE 148 148
FT PART OF THE CATALYTIC TRIAD (BY
FT SIMILARITY).
FT SITE 151 151
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 158 158
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 160 160
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 161 161
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 254 254
FT PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SEQUENCE 266 AA; 29661 MW; EC8F496061227974 CRC64;
SQ
Query Match 3.8%; Score 7; DB 1; Length 266;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 33 PASSLSS 39
DB 149 PASSLSS 155
RESULT 12
NAGB_PASMU STANDARD; PRT; 267 AA.
AC Q9CMF4;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Glucosamine-6-phosphate deaminase (EC 3.5.99.6) (Glucosamine-6-
DE phosphate isomerase) (GNPDA) (GlcN6P deaminase).
GN NAGB OR PM0875.
OS Pasteurella multocida.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pasteurellales;
OC Pasteurellaceae; Pasteurella.
OX NCBI_TaxID=747;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Pm70;
RX MEDLINE=21145866; PubMed=11248100;
RA May B.J., Zhang Q., Li L.L., Paustian M.L., Whittam T.S., Kapur V.;
RT "Complete genomic sequence of Pasteurella multocida Pm70.";
RL Proc. Natl. Acad. Sci. U.S.A. 98:3460-3465(2001).
CC -!- FUNCTION: Catalyzes the reversible isomerization-deamination of
CC glucosamine 6-phosphate (GlcN6P) to form fructose 6-phosphate
CC (Fru6P) and ammonium ion (By similarity).
CC -!- CATALYTIC ACTIVITY: D-glucosamine 6-phosphate + H(2)O = D-fructose
CC 6-phosphate + NH(3).
CC -!- ENZYME REGULATION: Allosterically activated by N-acetylglucosamine
CC 6-phosphate (GlcNAc6P) (By similarity).
CC -!- PATHWAY: N-acetylglucosamine utilization.
CC -!- SUBUNIT: Homohexamer (By similarity).
CC -!- SIMILARITY: Belongs to the glucosamine/galactosamine-6-phosphate
CC isomerase family. NagB subfamily.

This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial

CC Saccharomycetales; Saccharomycetaceae; Saccharomyces.
OX NCBI_TaxID=4932;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92225069; PubMed=1563492;
RA Nisogi H., Kominami K.-I., Tanaka K., Toh-E A.;
RT "A new essential gene of Saccharomyces cerevisiae, a defect in it may
RL result in instability of nucleus.";
RN Exp. Cell Res. 200;48-57(1992).
[2]
RP SEQUENCE FROM N.A.
RX STRAIN=S288c / AB972;
MEDLINE=95400292; PubMed=7670463;
RA Murakami Y., Naitou M., Hagiwara H., Shibata T., Ozawa M.,
RA Sasanuma S.-I., Sasanuma M., Tsuchiya Y., Soeda E., Yokoyama K.,
RA Yamazaki M., Tashiro H., Eki T.;
RT "Analysis of the nucleotide sequence of chromosome VI from
RL Saccharomyces cerevisiae.";
RN Nat. Genet. 10:261-268(1995).
[3]
RP SEQUENCE FROM N.A.
RX STRAIN=S288c / AB972;
MEDLINE=96287652; PubMed=8696379;
RA Eki T., Naitou M., Hagiwara H., Ozawa M., Sasanuma S.-I.,
RA Sasanuma M., Tsuchiya Y., Shibata T., Hanaoka F., Murakami Y.;
RT "Analysis of a 36.2 kb DNA sequence including the right telomere of
RL chromosome VI from Saccharomyces cerevisiae.";
RN Yeast 12:149-167(1996).
[4]
RP CHARACTERIZATION.
RX MEDLINE=95347337; PubMed=7621825;
RA Kominami K.-I., DeMartino G.N., Moosaw C., Slaughter C.A.,
RA Shimbara N., Fujimuro M., Yokosawa H., Hisamatsu H., Tanahashi N.,
RA Shimizu Y., Tanaka K., Toh-E A.;
RT "Nin1p, a regulatory subunit of the 26S proteasome, is necessary for
RT activation of Cdc28p kinase of Saccharomyces cerevisiae.";
RL EMBO J. 14:3105-3115(1995).
CC -!- FUNCTION: Acts as a regulatory subunit of the 26S proteasome which
CC is involved in the ATP-dependent degradation of ubiquitinated
CC proteins. Necessary for activation of the CDC28 kinase.
CC -!- SIMILARITY: Belongs to the proteasome subunit S14 family.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

DR EMBL; D10515; BAA01390.1; -
DR EMBL; D50617; BAA09291.1; -
DR PIR; S27434; S27434.
DR GeneOnline; 140206; -
DR SGD; S0001948; RPN12.
DR GO; GO:0005838; C:proteasome regulatory particle (sensu Eukarya); IDA.
DR GO; GO:0004175; F:endorpeptidase activity; NAS.
DR GO; GO:0006511; P:ubiquitin-dependent protein catabolism; IMP.
DR InterPro; IPR006746; Nin1_C.
DR Pfam; PF04653; Nin1_C; 1.
DR Proteasome.
SQ SEQUENCE 274 AA; 31919 MW; D901AAD4D07ED3D1 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 274;
Best Local Similarity 100.0%; Pred.No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 92 DSSLSP 98
Db 139 DSSLSP 145

RESULT 15

YS97_CAEEL
ID YS97 CAEEL STANDARD; PRT; 319 AA.
AC Q09966;
DT 01-OCT-1996 (Rel. 34, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Putative G protein-coupled receptor B0244.7.
GN B0244.7.
OS Caenorhabditis elegans.
OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
OC Rhabditidae; Peloderinae; Caenorhabditis.
OX NCBI_TaxID=6239;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Bristol N2;
RA Favello A.;
RL Submitted (JUN-1995) to the EMBL/GenBank/DBJ databases.
RN [2]
RP REVISIONS.
RA Waterston R.;
RL Submitted (JUN-2001) to the EMBL/GenBank/DBJ databases.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein (Potential).
CC -!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
CC Subfamily B0244.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

DR EMBL; U28971; AAK68670.1; -
DR WormPep; B0244.7; CE26790.
DR GO; GO:0016021; C:integral to membrane; NAS.
DR GO; GO:0004930; F:G-protein coupled receptor activity; NAS.
DR GO; GO:0007186; P:G-protein coupled receptor protein signalin. -; NAS.
DR InterPro; IPR000276; GPCR_Rhodpsn.
DR Pfam; PF00001; 7tm_1; 1.
DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
KW Hypothetical protein; G-protein coupled receptor; Transmembrane;
KW Glycoprotein.
FT TRANSMEM 49 69 POTENTIAL.
FT TRANSMEM 107 127 POTENTIAL.
FT TRANSMEM 131 151 POTENTIAL.
FT TRANSMEM 166 186 POTENTIAL.
FT TRANSMEM 206 226 POTENTIAL.
FT TRANSMEM 261 281 POTENTIAL.
FT CARBOHYD 28 28 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 319 AA; 35782 MW; 023718AACBE8366C CRC64;

Query Match 3.8%; Score 7; DB 1; Length 319;
Best Local Similarity 100.0%; Pred.No. 29;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 LLLWVSA 25
Db 170 LLLWVSA 176

RESULT 16
LICI_BURCE
ID LICI BURCE STANDARD; PRT; 344 AA.
AC P22089;
DT 01-AUG-1991 (Rel. 19, Created)
DT 01-AUG-1991 (Rel. 19, Last sequence update)
DT 01-OCT-1994 (Rel. 30, Last annotation update)
DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
DE (Lipase activator protein) (Lipase modulator).
GN LIPB OR LIMA.
OS Burkholderia cepacia (Pseudomonas cepacia).

CC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
CC Burkholderiaceae; Burkholderia.
OX NCBI_TaxID=292;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=DSM 3959;
RX MEDLINE=91100343; PubMed=1987151;
RA Joergensen S., Skov K.W., Diderichsen B.;
RT "Cloning, sequence, and expression of a lipase gene from Pseudomonas
ET cepacia: lipase production in heterologous hosts requires two
RT Pseudomonas genes.";
RJ J. Bacteriol. 173:559-567 (1991).
CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored (By similarity).
CC -!- SIMILARITY: Belongs to the lipase chaperone family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC

DR EMBL; M58494; AAA50467.1; --
DR PIR; B39133; B39133.
DR InterPro; IPR004961; Lipase_chap.
DR Pfam; PF03280; Lipase_chap; 1.
KW Lipid degradation; Chaperone; Transmembrane; Periplasmic;
KW Inner membrane.
FT TRANSMEM 14 34 POTENTIAL.
SQ SEQUENCE 344 AA; 36445 MW; 32AF7F82247164DB CRC64;

Query Match 3.8%; Score 7; DB 1; Length 344;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 17
LIC2_BURCE
ID LIC2_BURCE STANDARD; PRT; 344 AA.
AC Q9ZEM5;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
DE Lipase activator protein} (Lipase modulator).
GN LIPB OR HP
OS Burkholderia cepacia (Pseudomonas cepacia).
OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
OC Burkholderiaceae; Burkholderia.
OX NCBI_TaxID=292;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 21808;
RX MEDLINE=99124623; PubMed=9925617;
RA Quyen D.T., Schmidt-Dannert C., Schmid R.D.;
RT "High-level formation of active Pseudomonas cepacia lipase after
RT heterologous expression of the encoding gene and its modified
RT chaperone in Escherichia coli and rapid in vitro refolding.";
RL Appl. Environ. Microbiol. 65:787-794 (1999).
CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM.
CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored (By similarity).
CC -!- SIMILARITY: Belongs to the lipase chaperone family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -

CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC

DR EMBL; AJ131766; CAA10510.1; --
DR InterPro; IPR004961; Lipase_chap.
DR Pfam; PF03280; Lipase_chap; 1.
KW Lipid degradation; Chaperone; Transmembrane; Periplasmic;
KW Inner membrane.
FT TRANSMEM 14 34 POTENTIAL.
SQ SEQUENCE 344 AA; 36421 MW; AC37A4EF919B71B5 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 344;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 18
LICH_PSESS
ID LICH_PSESS STANDARD; PRT; 344 AA.
AC P25276;
DT 01-MAY-1992 (Rel. 22, Created)
DT 01-MAY-1992 (Rel. 22, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
DE Lipase activator protein} (Lipase modulator) (Transcriptional
DE activator act).
GN LIPB OR ACT.
OS Pseudomonas sp. (strain KWI-56).
OC Bacteria; Proteobacteria.
OX NCBI_TaxID=311;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92118328; PubMed=1368739;
RA Iizumi T., Nakamura K., Shimada Y., Sugihara A., Tomimaga Y.,
RA Fukase T.;
RT "Cloning, nucleotide sequencing, and expression in Escherichia coli
RT of a lipase and its activator genes from Pseudomonas sp. KWI-56.";
RL Agric. Biol. Chem. 55:2349-2357 (1991).
CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored (By similarity).
CC -!- SIMILARITY: Belongs to the lipase chaperone family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC

DR EMBL; D10069; BAA00961.1; --
DR EMBL; S77842; AAC60401.1; --
DR InterPro; IPR004961; Lipase_chap.
DR Pfam; PF03280; Lipase_chap; 1.
KW Lipid degradation; Chaperone; Transmembrane; Periplasmic;
KW Inner membrane.
FT TRANSMEM 14 34 POTENTIAL.
SQ SEQUENCE 344 AA; 36544 MW; ABD9F8F68A44108B CRC64;

Query Match 3.8%; Score 7; DB 1; Length 344;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||

Db 270 LGPEAAA 276

RESULT 19
LICH_PSEGL
ID LICH_PSEGL STANDARD; PRT; 353 AA.
AC Q05490;
DT 01-OCT-1994 (Rel. 30, Created)
DT 01-OCT-1994 (Rel. 30, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
DE (Lipase activator protein) (Lipase modulator).
GN LIPB.
OS Pseudomonas glumae.
OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
OC Burkholderiaceae; Burkholderia.
OX NCBI_TaxID=337;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=PG1;
RX MEDLINE=94318652; PubMed=8412704;
RA Frenken L.G.J., Bos J.W., Visser C., Mueller W., Tommassen J.,
RA Verrips C.T.;
RT "An accessory gene, lipB, required for the production of active
Pseudomonas glumae lipase."
RL Mol. Microbiol. 9:579-589(1993).
RN [2]
RP FUNCTION.
RX MEDLINE=94018653; PubMed=8412705;
RA Frenken L.G.J., de Groot A., Tommassen J., Verrips C.T.;
RT "Role of the lipB gene product in the folding of the secreted lipase
of Pseudomonas glumae."
RL Mol. Microbiol. 9:591-599(1993).
CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM.
CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored.
CC -!- SIMILARITY: Belongs to the lipase chaperone family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
or send an email to license@isb-sib.ch).
CC
CC EMBL; X70354; CAA49813.1; -
DR PIR; S36249; S36249.
DR InterPro; IPR004961; Lipase_chap.
DR Pfam; PF03280; Lipase_chap; 1.
KW Lipid degradation; Chaperone; Transmembrane; Periplasmic;
FT inner membrane.
FT TRANSMEM 20 40 POTENTIAL.
SQ SEQUENCE 353 AA; 36830 MW; 57C5916D78EBB643 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 353;
Best Local Similarity 100.0%; Pred. No. 32;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 LGPEAAA 11
Db 281 LGPEAAA 287

RESULT 20
TBX1_HUMAN
ID TBX1_HUMAN STANDARD; PRT; 398 AA.
AC O43435; O43436; Q96RJ2;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE T-box transcription factor TBX1 (T-box protein 1) (Testis-specific
T-box protein).
DE

TBX1.
GN Homo sapiens (Human).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS A AND B).
RC TISSUE=Skeletal muscle, and Testis;
RX MEDLINE=97422603; PubMed=9268629;
RA Chieffo C., Garvey N., Gong W., Roe B., Zhang G., Silver L.,
RA Emanuel B.S., Budarf M.L.;
RT "Isolation and characterization of a gene from the DiGeorge
chromosomal region homologous to the mouse Tbx1 gene."
RL Genomics 43:267-277(1997).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM C).
RA Gong W., Gottlieb S., Budarf M.L.;
RT "Mutation analysis of TBX1 in 105 patients."
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -!- SUBCELLULAR LOCATION: Nuclear (Potential).
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=3;
CC Name=A;
CC IsoId=O43435-1; Sequence=Displayed;
CC Name=B;
CC IsoId=O43435-2; Sequence=VSP_006383;
CC Name=C; Synonyms=TBX1C;
CC IsoId=O43435-3; Sequence=VSP_007423;
CC -!- SIMILARITY: Contains 1 T-box domain.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
or send an email to license@isb-sib.ch).
CC
CC EMBL; AF012130; AAB94018.1; -
DR EMBL; AF012131; AAB94019.1; -
DR EMBL; AF373867; AAK58955.1; -
DR HSSP; P24781; 1XBR.
DR TRANSFAC; T04352; -
DR TRANSFAC; T04354; -
DR Genew; HGNC:11592; TBX1.
DR MIM; 602054; -
DR GO; GO:0003702; E:RNA polymerase II transcription factor acti. . .; TAS.
DR GO; GO:0007345; P:embryogenesis and morphogenesis; TAS.
DR GO; GO:0007507; P:heart development; TAS.
DR GO; GO:0006357; P:regulation of transcription from Pol II pro. . .; TAS.
DR InterPro; IPR008967; P53-like.
DR InterPro; IPR001699; TF T-box.
DR Pfam; PF00907; T-box; 1.
DR PRINTS; PR00937; TBOX.
DR SMART; SM00425; TBOX; 1.
DR PROSITE; PS01283; TBOX_1; 1.
DR PROSITE; PS01264; TBOX_2; 1.
DR PROSITE; PS02522; TBOX_3; 1.
KW Transcription regulation; DNA-binding; Nuclear protein;
KW Alternative splicing.
FT DOMAIN 43 48 POLY-PRO.
FT DOMAIN 54 57 POLY-ALA.
FT DOMAIN 61 67 POLY-PRO.
FT DOMAIN 94 99 POLY-ALA.
FT DNA BIND 119 297 T-BOX.
FT VARSPLIC 338 398 GHVLKDKVKAKTSRNTPERVELLRDAGGVNLGLPCPAE
FT FT CQFNTQGLVAGRTAGDRLC -> LVTEGSLQPLGLDVL
FT FT KPPSKSESLRPPHCKDT (in isoform B).
FT FT /FTId=VSP_006383.
FT FT GGHVLKDKVKAKTSRNTPERVELLRDAGGVNLGLPCPA
FT FT ECQFNTQGLVAGRTAGDRLC -> DAAEARFORADAGGP
FT FT AVLGDPAHPFOLLARVLSPLGAGGAGGLVPLPGAGGRP
FT FT SPNPELRLEAPGASEPLHHYPKYPAAAYDHYLGAKSRPA
FT FT VARSPLIC 337 398

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

DR EMBL; BX640438; CAE30881.1; --
DR HAMAP; MF_00087; --; 1.
DR InterPro; IPR000343; GlutR.
DR InterPro; IPR006162; Ppantne S.
DR Pfam; PF00745; GlutR_dimer; 1.
DR Pfam; PF05201; GlutR_N; 1.
DR Pfam; PF05200; GlutR_NAD_bind; 1.
DR TIGRFAMS; TIGR01035; hemA; 1.
DR PROSITE; PS00747; GLUTR; 1.
KW Porphyrin biosynthesis; Oxidoreductase; NADP; Complete proteome.
FT ACT_SITE 54 54 NUCLEOPHILE (BY SIMILARITY).
FT ACT_SITE 101 101 BASE (BY SIMILARITY).
SQ SEQUENCE 424 AA; 46735 MW; 3E9540D9435A8A27 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 424;
Best Local Similarity 100.0%; Pred.No. 38;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 EAAALRP 14
Db 82 EAAALRP 88
|||||

RESULT 23
HEMI_BORPA
ID HEMI BORPA STANDARD; PRT; 424 AA.
AC Q7WCE4;
DT 15-MAR-2004 (Rel. 43, Created)
DT 15-MAR-2004 (Rel. 43, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Glutamyl-tRNA reductase (EC 1.2.1.-) (GlutR).
GN HEMA OR BPP0381.
OS Bordetella parapertussis.
OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
OC Alcaligenaceae; Bordetella.
OX NCBI_TaxID=519;
RN [1]
SEQUENCE FROM N.A.
RC STRAIN=12822 / ATCC BAA-587;
RX MEDLINE=22827954; PubMed=12910271;
RA Parkhill J., Sebahia M., Preston A., Murphy L.D., Thomson N.,
RA Harris D.E., Holden M.T.G., Churcher C.M., Bentley S.D., Mungall K.L.,
RA Cardeno-Tarraga A.M., Temple L., James K., Harris B., Quail M.A.,
RA Achtmann M., Atkin R., Baker S., Basham D., Bason N., Cherevach I.,
RA Chillingworth T., Collins M., Cronin A., Davis P., Doggett J.,
RA Feltwell T., Goble A., Hamlin N., Hauser H., Holroyd S., Jagels K.,
RA Leather S., Moule S., Norberczak H., O'Neil S., Ormond D., Price C.,
RA Rabinowitsch E., Rutter S., Saunders R., Squares S., Stevens K.,
RA Sharp S., Simmonds M., Skelton J., Squares R., Seeger K.,
RA Unwin L., Whitehead S., Barrell B.G., Maskell D.J.,
RT "Comparative analysis of the genome sequences of Bordetella pertussis,
RT Bordetella parapertussis and Bordetella bronchiseptica.";
RL Nat. Genet. 35:32-40(2003).
CC -!- CATALYTIC ACTIVITY: Glutamyl-tRNA(Glu) + NADPH = glutamate-1-
CC semialdehyde + NADP(+) + tRNA(Glu).
CC -!- PATHWAY: Porphyrin biosynthesis by the C5 pathway; first step.
CC -!- SIMILARITY: Belongs to the glutamyl-tRNA reductase family.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

DR EMBL; BX640412; CAE45003.1; --
DR HAMAP; MF_00087; --; 1.
DR InterPro; IPR000343; GlutR.
DR InterPro; IPR006162; Ppantne S.
DR Pfam; PF00745; GlutR_dimer; 1.

CC or send an email to license@isb-sib.ch.
CC
DR EMBL; BX640424; CAE35965.1; --
DR HAMAP; MF_00087; --; 1.
DR InterPro; IPR000343; GlutR.
DR InterPro; IPR006162; Ppantne S.
DR Pfam; PF00745; GlutR_dimer; 1.
DR Pfam; PF05201; GlutR_N; 1.
DR Pfam; PF05200; GlutR_NAD_bind; 1.
DR TIGRFAMS; TIGR01035; hemA; 1.
DR PROSITE; PS00747; GLUTR; 1.
KW Porphyrin biosynthesis; Oxidoreductase; NADP; Complete proteome.
FT ACT_SITE 54 54 NUCLEOPHILE (BY SIMILARITY).
FT ACT_SITE 101 101 BASE (BY SIMILARITY).
SQ SEQUENCE 424 AA; 46735 MW; 3E9540D9435A8A27 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 424;
Best Local Similarity 100.0%; Pred.No. 38;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 EAAALRP 14
Db 82 EAAALRP 88
|||||

RESULT 24
HEMI_BORPE
ID HEMI BORPE STANDARD; PRT; 424 AA.
AC Q7VRY3;
DT 15-MAR-2004 (Rel. 43, Created)
DT 15-MAR-2004 (Rel. 43, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Glutamyl-tRNA reductase (EC 1.2.1.-) (GlutR).
GN HEMA OR BPO677.
OS Bordetella pertussis.
OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
OC Alcaligenaceae; Bordetella.
OX NCBI_TaxID=520;
RN [1]
SEQUENCE FROM N.A.
RC STRAIN=Tohama I / ATCC BAA-589 / NCTC 13251;
RX MEDLINE=22827954; PubMed=12910271;
RA Parkhill J., Sebahia M., Preston A., Murphy L.D., Thomson N.,
RA Harris D.E., Holden M.T.G., Churcher C.M., Bentley S.D., Mungall K.L.,
RA Cardeno-Tarraga A.M., Temple L., James K., Harris B., Quail M.A.,
RA Achtmann M., Atkin R., Baker S., Basham D., Bason N., Cherevach I.,
RA Chillingworth T., Collins M., Cronin A., Davis P., Doggett J.,
RA Feltwell T., Goble A., Hamlin N., Hauser H., Holroyd S., Jagels K.,
RA Leather S., Moule S., Norberczak H., O'Neil S., Ormond D., Price C.,
RA Rabinowitsch E., Rutter S., Saunders R., Squares R., Seeger K.,
RA Sharp S., Simmonds M., Skelton J., Squares R., Seeger K.,
RA Unwin L., Whitehead S., Barrell B.G., Maskell D.J.,
RT "Comparative analysis of the genome sequences of Bordetella pertussis,
RT Bordetella parapertussis and Bordetella bronchiseptica.";
RL Nat. Genet. 35:32-40(2003).
CC -!- CATALYTIC ACTIVITY: Glutamyl-tRNA(Glu) + NADPH = glutamate-1-
CC semialdehyde + NADP(+) + tRNA(Glu).
CC -!- PATHWAY: Porphyrin biosynthesis by the C5 pathway; first step.
CC -!- SIMILARITY: Belongs to the glutamyl-tRNA reductase family.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

DR EMBL; BX640412; CAE45003.1; --
DR HAMAP; MF_00087; --; 1.
DR InterPro; IPR000343; GlutR.
DR InterPro; IPR006162; Ppantne S.
DR Pfam; PF00745; GlutR_dimer; 1.

DR Pfam; PF05201; GlutR_N; 1.
 DR Pfam; PF05200; GlutR_NAD_bind; 1.
 DR TIGRFAMs; TIGR01035; hemA; 1.
 DR PROSITE; PS00747; GLUTR; 1.
 KW Porphyrin biosynthesis; Oxidoreductase; NADP; Complete proteome.
 FT ACT_SITE 54 54 NUCLEOPHILE (BY SIMILARITY).
 FT ACT_SITE 101 101 BASE (BY SIMILARITY).
 SQ SEQUENCE 424 AA; 46765 MW; 3E954CA8435A8F26 CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 424;
 Best Local Similarity 100.0%; Pred. No. 38;
 Matches 7; Conservative C; Mismatches 0; Indels 0; Gaps 0;
 QY 8 EAAALRP 14
 Db 82 EAAALRP 88
 RESULT 26
 VTNC_RABIT
 ID VTNC_RABIT STANDARD; PRT; 475 AA.
 AC P22458;
 DT 01-AUG-1991 (Rel. 19, Created)
 DT 01-AUG-1991 (Rel. 19, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Vitronectin precursor (Serum spreading factor) (S-protein)
 DE (Glycoprotein 66).
 GN VTN.
 OS Oryctolagus cuniculus (Rabbit).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
 OX NCBI_TaxID=9986;
 RN [1]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RX MEDLINE=91065939; PubMed=1701177;
 RA Sato R., Komine Y., Imanaka T., Takano T.;
 RT "Monoclonal antibody EM1a/212D recognizing site of deposition of
 RT extracellular lipid in atherosclerosis. Isolation and
 RT characterization of a cDNA clone for the antigen.";
 RL J. Biol. Chem. 265:21232-21236(1990).
 CC -!- FUNCTION: VITRONECTIN IS A CELL ADHESION AND SPREADING FACTOR
 CC FOUND IN SERUM AND TISSUES. VITRONECTIN INTERACT WITH
 CC GLYCOSAMINOGLYCANS AND PROTEOGLYCANS. IS RECOGNIZED BY CERTAIN
 CC MEMBERS OF THE INTEGRIN FAMILY AND SERVES AS A CELL-TO-SUBSTRATE
 CC ADHESION MOLECULE. INHIBITOR OF THE MEMBRANE-DAMAGING EFFECT OF
 CC THE TERMINAL CYTOLYTIC COMPLEMENT PATHWAY.
 CC -!- SUBUNIT: Monomer.
 CC -!- SUBCELLULAR LOCATION: Extracellular.
 CC -!- TISSUE SPECIFICITY: Plasma.
 CC -!- PTM: Sulfated on 2 tyrosine residues (By similarity).
 CC -!- SIMILARITY: Contains 2 hemopexin-like domains.
 CC -!- SIMILARITY: Contains 1 somatomedin-B type domain.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; M55442; AAA31258.1; -.
 DR PIR; A38340; A38340.
 DR HSSP; P45452; LPEX.
 DR InterPro; IPR000585; Hemopexin.
 DR InterPro; IPR001212; Somatomedin_B.
 DR Pfam; PF00045; hemopexin; 4.
 DR Pfam; PF01033; Somatomedin_B; 1.
 DR PRINTS; PR00022; SOMATOMEDINB.
 DR SMART; SM0120; HX; 4.
 DR SMART; SM00201; SO; 1.
 DR PROSITE; PS00024; HEMOPEXIN; 2.
 DR PROSITE; PS00524; SOMATOMEDIN_B; 1.

KW Heparin-binding; Cell adhesion; Glycoprotein; Sulfation; Repeat;
 KW Signal.
 FT SIGNAL 1 19
 FT CHAIN 20 475
 FT DOMAIN 20 63
 FT DOMAIN 150 287
 FT DOMAIN 288 475
 FT DOMAIN 366 392
 FT SITE 64 66
 FT DISULFID 24 28
 FT DISULFID 38 40
 FT DISULFID 44 50
 FT DISULFID 51 58
 FT MOD_RES 75 75
 FT MOD_RES 78 78
 FT MOD_RES 80 80
 FT MOD_RES 279 279
 FT MOD_RES 282 282
 FT CARBOHYD 87 87
 FT CARBOHYD 169 169
 FT CARBOHYD 242 242
 SQ SEQUENCE 475 AA; 53943 MW; D5D1F31B8C2FA12D CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 475;
 Best Local Similarity 100.0%; Pred. No. 42;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 17 LALLLWV 23
 Db 10 LALLLWV 16

RESULT 26
 KALM_CHICK
 ID KALM_CHICK STANDARD; PRT; 676 AA.
 AC P33005;
 DT 01-OCT-1993 (Rel. 27, Created)
 DT 01-OCT-1993 (Rel. 27, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Anosmin 1 precursor (Kallmann syndrome protein homolog).
 GN KAL.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX TISSUE=Brain;
 RA MEDLINE=94010957; PubMed=8406507;
 RA Iegouis R., Cohen-Salmon M., del Castillo I., Levilliers J.,
 RA Capy L., Mornon J.-P., Petit C.;
 RT "Characterization of the chicken and quail homologues of the human
 RT gene responsible for the X-linked Kallmann syndrome.";
 RL Genomics 17:516-518(1993).
 CC -!- FUNCTION: May be an adhesion-like molecule with anti-protease
 CC activity.
 CC -!- SUBCELLULAR LOCATION: Secreted. Localized at cell surface (By
 CC similarity).
 CC -!- SIMILARITY: Contains 4 fibronectin type III domains.
 CC -!- SIMILARITY: Contains 1 WAP-type domain.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; L12144; AAA51435.1; -.
 DR PIR; B47222; B47222.
 DR HSSP; P19957; 2REL.

DT 30-MAY-2000 (Rel. 39, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Segment polarity protein dishevelled homolog DVL-1 (Dishevelled-1)
DE (DSH homolog 1).
GN DVL1.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Wistar Kyoto;
RX MEDLINE=21254118; PubMed=11354832;
RA de Lange R.P.J., Burr K., Clark J.S., Negrin C.D., Brosnan M.J.,
RA St Clair D.M., Dominiczak A.F., Shaw D.J.;
RT "Mapping and sequencing rat dishevelled-1: a candidate gene for
RT cerebral ischaemic insult in a rat model of stroke."
RL Neurogenetics 3:99-106(2001).
CC -!- FUNCTION: May play a role in the signal transduction pathway
CC mediated by multiple Wnt genes.
CC -!- SUBCELLULAR LOCATION: Cytoplasmic (Potential).
CC -!- SIMILARITY: Belongs to the DSH family.
CC -!- SIMILARITY: Contains 1 DEP domain.
CC -!- SIMILARITY: Contains 1 PDZ/DHR domain.
CC -!- SIMILARITY: Contains 1 DIX domain.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC
CC -----
DR EMBL; AF143545; AAD33896.2; -
DR EMBL; AF143546; AAD33897.2; -
DR EMBL; AF143548; AAD41492.2; -
DR EMBL; AF143547; AAD41492.2; JOINED.
DR EMBL; AF143550; AAD41493.1; -
DR EMBL; AF143549; AAD41493.1; JOINED.
DR InterPro; IPR000591; DEP.
DR InterPro; IPR008339; Dishevell.
DR InterPro; IPR003351; Dishevelled.
DR InterPro; IPR008340; Dishevelled_1.
DR InterPro; IPR001158; DIX.
DR InterPro; IPR001478; PDZ.
DR Pfam; PF00610; DEP; 1.
DR Pfam; PF02377; Dishevelled; 1.
DR Pfam; PF00778; DIX; 1.
DR Pfam; PF00595; PDZ; 1.
DR PRINTS; PR01760; DISHEVELLED.
DR PRINTS; PR01761; DISHEVELLED1.
DR ProDom; PD003639; DIX; 1.
DR SMART; SMC0021; DAX; 1.
DR SMART; SMC0049; DEP; 1.
DR SMART; SMC0228; PDZ; 1.
DR PROSITE; PS50186; DEP; 1.
DR PROSITE; PS50841; DIX; 1.
DR PROSITE; PS50106; PDZ; 1.
KW Wnt signaling pathway; Developmental protein.
FT DOMAIN 1 85 DIX.
FT DOMAIN 251 323 PDZ.
FT DOMAIN 425 499 DEP.
SQ SEQUENCE 695 AA; 75447 MW; EEC4AA99A117D22A CRC64;

Query Match 3.8%; Score 7; DB 1; Length 695;
Best Local Similarity 100.0%; Pred. NO. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 87 LGLPPDS 93
Db 171 LGLPPDS 177

RESULT 29
COAT_SMSV1

ID COAT_SMSV1 STANDARD; PRT; 702 AA.
AC P36284;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE Coat protein (Capsid protein).
OS San Miguel sea lion virus (serotype 1) (SMSV 1).
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Caliciviridae;
OC Vesivirus.
OX NCBI_TaxID=36406;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92410750; PubMed=1529644;
RA Neill J.D.;
RT "Nucleotide sequence of the capsid protein gene of two serotypes of
RT San Miguel sea lion virus: identification of conserved and non-
RT conserved amino acid sequences among calicivirus capsid proteins.";
RL Virus Res. 24:211-222(1992).
CC -!- SIMILARITY: TO CAPSID PROTEIN OF OTHER CALICIVIRUSES.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC
CC -----
DR EMBL; M87481; AAA16217.1; -
DR PIR; A48562; A48562.
DR InterPro; IPR004005; Calici_coat.
DR InterPro; IPR008975; Viral_cap_coat.
DR Pfam; PF00915; Calici_coat; 1.
KW Coat protein; Glycoprotein.
FT CARBOHYD 208 208 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 481 481 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 493 493 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 545 545 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 702 AA; 77850 MW; EGE5A58523DEE3D7 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 702;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 89 LPPDSL 95
Db 635 LPPDSL 641

RESULT 30
NFC1_MOUSE

ID NFC1_MOUSE STANDARD; PRT; 717 AA.
AC O88942; O70345;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Nuclear factor of activated T-cells, cytoplasmic 1 (NFAT transcription
DE complex cytosolic component) (NF-ATc1) (NF-ATc).
GN NFATC1 OR NFATC OR NFAT2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM BETA).
RX MEDLINE=98049829; PubMed=9388475;
RA Pan S., Koyano-Nakagawa N., Tsuruta L., Amasaki Y., Yokota T.,
RA Mori S., Arai N., Arai K.-I.;
RT "Molecular cloning and functional characterization of murine cDNA

Query Match 3.8%; Score 7; DB 1; Length 695;
Best Local Similarity 100.0%; Pred. NO. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 87 LGLPPDS 93
Db 171 LGLPPDS 177

RT encoding transcription factor NFATC.";
RL Biochem. Biophys. Res. Commun. 240:314-323(1997).
RN [2]

RP SEQUENCE FROM N.A. (ISOFORM ALPHA).
RC STRAIN=BALB/c; TISSUE=Fetal liver, and Mast cells;
RX MEDLINE=9917218; PubMed=10072529;
RA Sherman M.A., Powell D.R., Weiss D.L., Brown M.A.;
RT "NF-ATC Isoforms are differentially expressed and regulated in murine
T and mast cells.";
RL J. Immunol. 162:2820-2828(1999).

CC -!- FUNCTION: Plays a role in the inducible expression of cytokine
CC genes in T cells, especially in the induction of the IL-2 or IL-4
CC gene transcription. Also control gene expression in embryonic
CC cardiac cells. Could regulate not only the activation and
CC proliferation but also the differentiation and programmed death of
CC T-lymphocytes as well as lymphoid and non-lymphoid cells (By
CC similarity).
CC

CC -!- SUBUNIT: Member of the multicomponent NFATC transcription complex
CC that consists of at least two components, a pre-existing
CC cytoplasmic component NFATC2 and an inducible nuclear component
CC NFATC1. Other members such as NFATC4, NFATC3 or members of the
CC activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind
CC the complex. NFATC proteins bind to DNA as monomers (By
CC similarity).
CC

CC -!- SUBCELLULAR LOCATION: Cytoplasmic for the phosphorylated form and
CC nuclear after activation that is controlled by calcineurin-
CC mediated dephosphorylation. Rapid nuclear exit of NFATC is thought
CC to be one mechanism by which cells distinguish between sustained
CC and transient calcium signals. The subcellular localization of
CC NFATC play a key role in the gene transcription (By similarity).
CC

CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=Alpha;
CC

CC Note=O88942-1; Sequence=Displayed;
CC Note=An additional isoform may be produced by alternative
CC initiation at Met-37 of isoform Alpha;
CC Name=Beta;
CC

CC IsoId=O88942-2; Sequence=VSP_005594;
CC Event=Alternative initiation;
CC Comment=2 isoforms may be produced by alternative initiation at
CC Met-1 and Met-37 of isoform Alpha;
CC

CC -!- TISSUE SPECIFICITY: Expressed in spleen, lung, skeletal muscle,
CC thymus and skin. Weakly expressed in heart, brain, liver and
CC kidney. Not expressed in testis.
CC

CC -!- DEVELOPMENTAL STAGE: Expression begins at E7 day and increases
CC until E17 day. Strongly expressed in thymus, lung and
CC submandibular gland and weakly in skeletal muscle and heart.
CC

CC -!- INDUCTION: Inducibly expressed in T lymphocytes upon activation of
CC the T-cell receptor (TCR) complex. Induced after addition of
CC phorbol 12-myristate 13-acetate (PMA).
CC

CC -!- DOMAIN: Rel Similarity Domain (RSD) allows DNA-binding and
CC cooperative interactions with AP1 factors (By similarity).
CC

CC -!- DOMAIN: The N-terminal transactivation domain (TAD-A) binds to and
CC is activated by Cbp/p300. The dephosphorylated form contains two
CC unmasked nuclear localization signals (NLS), which allow
CC translocation of the protein to the nucleus (By similarity).
CC

CC -!- PTM: Phosphorylated by NFATC-kinase; dephosphorylated by
CC calcineurin (By similarity).
CC

CC -!- SIMILARITY: Belongs to the Rel/Dorsal family.
CC

CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----

DR EMBL: AF049606; AAC05505.1;
DR EMBL: AF087434; AAC36725.1;
DR TRNSFAC: T01947;
DR MGD: MGI:102469; Nfatc1.
DR GO: GO:0005737; C:cytoplasm; IDA.

DR GO: GO:0005634; C:nucleus; IDA.
DR GO: GO:0003677; F:DNA binding; IDA.
DR InterPro: IPR007110; Ig-like.
DR InterPro: IPR002909; IPT_TIG.
DR InterPro: IPR000451; NF_Rel_dor.
DR InterPro: IPR008366; NFAT.
DR InterPro: IPR008967; P53-like.
DR Pfam: PF00554; RHD; 1.
DR Pfam: PF01833; TIG; 1.
DR PRINTS: PR01789; NUCFACTORATC.
DR SMART: SM00429; IPT; 1.
DR PROSITE: PS01204; REL_1; FALSE_NEG.
DR PROSITE: PS50254; REL_2; 1.
DR Transcription regulation; Activator; Nuclear protein; DNA-binding;
DR Alternative initiation; Alternative splicing; Phosphorylation; Repeat.
KW NUCLEAR FACTOR OF ACTIVATED T-CELLS,
FT CHAIN 1 717
FT CYTOPLASMIC 1.
FT CHAIN 37 717
FT NUCLEAR FACTOR OF ACTIVATED T-CELLS,
FT CYTOPLASMIC 1, ISOFORM ALPHA-TYPE.
FT INIT MET 37 37
FT DOMAIN 120 125
FT DOMAIN 128 220
FT DOMAIN 205 300
FT REPEAT 205 221
FT REPEAT 235 251
FT REPEAT 284 300
FT DOMAIN 267 269
FT DOMAIN 312 323
FT DOMAIN 440 447
FT DOMAIN 683 685
FT MOD RES 119 119
FT VARSPPLIC 1 42
FT
FT
FT
SQ SEQUENCE 717 AA; 77833 MW; 58837C6CC085268D CRC64;
Query Match 3.8%; Score 7; DB 1; Length 717;
Best Local Similarity 100.0%; Pred. No. 61;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 33 PASSLS 39
Db 175 PASSLS 181
RESULT 31
BRD2_HUMAN
ID BRD2_HUMAN STANDARD; PRT; 801 AA.
AC P25440; O00699; O00700; Q15310; Q969U4;
DT 01-MAY-1992 (Rel. 22, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Bromodomain-containing protein 2 (RING3 protein) (O27.1.1).
GN BRD2 OR RING3 OR KIAA9001.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=T-cell;
RX MEDLINE=92329974; PubMed=1352711;
RA Beck S., Hanson I., Kelly A., Pappin D.J.C., Trowsdale J.;
RT "A homologue of the Drosophila female sterile homeotic (fsh) gene in
RL the class II region of the human MHC.";
RL DNA Seq. 2:203-210(1992).
RN [2]
RP REVISIONS TO N-TERMINUS.
RX MEDLINE=96376536; PubMed=8781126;
RA Thorpe K.L., Abdulla S., Kaufman J., Trowsdale J., Beck S.;
RT "Phylogeny and structure of the RING3 gene.";
RL Immunogenetics 44:391-396(1996).

```
[3]
RP SEQUENCE FROM N.A.
RC TISSUE=Bone marrow;
RA Nomura N., Miyajima N., Sazuka T., Tanaka A., Kawarabayashi Y.,
RA Sato S., Nagase T., Seki T., Ishikawa K.-I., Tabata S.;
RL Submitted (JUL-1997) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Thorpe K.;
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
CC -!- SUBCELLULAR LOCATION: Nuclear (Potential).
CC -!- SIMILARITY: Contains 2 bromodomains.
CC -!- SIMILARITY: Contains 1 ET domain.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; X62083; CAA43996.1; -.
DR EMBL; M80613; AAA68890.1; ALT_INIT.
DR EMBL; D42040; BAA07641.1; -.
DR EMBL; Z84497; CAC69991.1; -.
DR EMBL; Z96104; CAC69989.1; -.
DR EMBL; X96670; CAA65450.1; -.
DR HSSP; Q92831; IB91.
DR Genew; HGNC:1103; BRD2.
DR MIM; 601540; -.
DR GO; GO:0004674; F:protein serine/threonine kinase activity; TAS.
DR GO; GO:0007283; P:spermatogenesis; TAS.
DR InterPro; IPR001487; Bromodomain.
DR Pfam; PF00439; bromodomain; 2.
DR PRINTS; PR00503; BROMODOMAIN.
DR SMART; SM00297; BROMO; 2.
DR PROSITE; PS00633; BROMODOMAIN_1; 2.
DR PROSITE; PS50014; BROMODOMAIN_2; 2.
DR Bromodomain; Repeat; Nuclear protein.
FT DOMAIN 91 163 BROMODOMAIN 1.
FT DOMAIN 364 436 BROMODOMAIN 2.
FT DOMAIN 476 515 GLU/SER-RICH.
FT DOMAIN 544 566 ARG/LYS-RICH (HIGHLY BASIC).
FT DOMAIN 775 801 SER-RICH.
FT DOMAIN 555 559 NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
FT DOMAIN 638 801 ET DOMAIN.
FT DOMAIN 61 64 POLY-PRO.
FT DOMAIN 492 506 POLY-GLU.
FT DOMAIN 551 559 POLY-LYS.
FT DOMAIN 634 638 POLY-GLU.
FT DOMAIN 775 793 POLY-SER.
FT CONFLICT 238 238 L -> F (IM REF. 4).
SQ SEQUENCE 801 AA; 88060 MW; 9A075EEB13507D8E CRC64;

Query Match 3.8%; Score 7; DB 1; Length 801;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
Db 22 LGPEAAA 28

RESULT 32
NFC1_PIG
ID _NFC1_PIG STANDARD; PRT; 822 AA.
AC O77638;
DT 16-OCT-2001 (Rel. 40, Created);
DT 16-OCT-2001 (Rel. 40, Last sequence update);
DT 15-MAR-2004 (Rel. 43, Last annotation update);
DE Nuclear factor of activated T-cells, cytoplasmic 1 (NFAT transcription
DE complex cytosolic component) (NF-ATc1) (NF-ATc) (NFATmac).
```

```
GN NFATC1 OR NFATC OR NFAT2.
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Alveolar macrophage;
RX MEDLINE=98342378; PubMed=9677199;
RA Miskin J.E., Abrams C.C., Goatley L.C., Dixon L.K.;
RT "A viral mechanism for inhibition of the cellular phosphatase
RT calcineurin.";
RL Science 281:562-565(1998).
CC -!- FUNCTION: Plays a role in the inducible expression of cytokine
CC genes in T cells, especially in the induction of the IL-2 or IL-4
CC gene transcription. Also control gene expression in embryonic
CC cardiac cells. Could regulate not only the activation and
CC proliferation but also the differentiation and programmed death of
CC T-lymphocytes as well as lymphoid and non-lymphoid cells.
CC -!- SUBUNIT: Member of the multicomponent NFATC transcription complex
CC that consists of at least two components, a pre-existing
CC cytoplasmic component NFATC2 and an inducible nuclear component
CC NFATC1. Other members such as NFATC4, NFATC3 or members of the
CC activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind
CC the complex. NFATC proteins bind to DNA as monomers (By
CC similarity).
CC -!- SUBCELLULAR LOCATION: Cytoplasmic for the phosphorylated form and
CC nuclear after activation that is controlled by calcineurin-
CC mediated dephosphorylation. Rapid nuclear exit of NFATC is thought
CC to be one mechanism by which cells distinguish between sustained
CC and transient calcium signals. The subcellular localization of
CC NFATC play a key role in the gene transcription.
CC -!- DOMAIN: Rel Similarity Domain (RSD) allows DNA-binding and
CC cooperative interactions with AP1 factors (By similarity).
CC -!- DOMAIN: The N-terminal transactivation domain (TAD-A) binds to and
CC is activated by CBP/p300. The dephosphorylated form contains two
CC unmasked nuclear localization signals (NLS), which allow
CC translocation of the protein to the nucleus (By similarity).
CC -!- PTM: Phosphorylated by NFATC-kinase; dephosphorylated by
CC calcineurin (By similarity).
CC -!- SIMILARITY: Belongs to the Rel/Dorsal family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AF069996; AAC27301.2; -.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR002909; IPT_TIG.
DR InterPro; IPR00451; NF_Rel_dor.
DR InterPro; IPR008366; NFAT.
DR InterPro; IPR008967; P53-like.
DR Pfam; PF00554; RHD; 1.
DR Pfam; PF01833; TIG; 1.
DR PRINTS; PR01789; NUCFACTORATC.
DR SMART; SM00429; IPT; 1.
DR PROSITE; PS01204; REL_1; FALSE_NEG.
DR PROSITE; PS0254; REL_2; 1.
DR Transcription regulation; Activator; Nuclear protein; DNA-binding;
DR Phosphorylation; Repeat.
FT DOMAIN 25 32 POLY-ALA.
FT DOMAIN 110 115 CALCINEURIN-BINDING.
FT DOMAIN 118 210 TRANS-ACTIVATION DOMAIN A (TAD-A).
FT DOMAIN 195 290 3 X SP REPEATS.
FT REPEAT 195 211 1.
FT REPEAT 225 241 2.
FT REPEAT 274 290 3.
FT DOMAIN 257 259 NUCLEAR LOCALIZATION SIGNAL.
FT DOMAIN 302 313 NUCLEAR EXPORT SIGNAL.
```



```
FT DOMAIN 429 436 DNA-BINDING.
FT DOMAIN 672 674 NUCLEAR LOCALIZATION SIGNAL.
FT MOD_RES 109 PHOSPHORYLATION (BY SIMILARITY).
SQ SEQUENCE 822 AA; 88009 MW; C891D851B3644833 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 822;
Best Local Similarity 100.0%; Pred.No. 69;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 33 PASSLS 39
Db 165 PASSLS 171

RESULT 33
HEX_ADECC
ID HEX_ADECC STANDARD; PRT; 905 AA.
AC Q65955;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last annotation update)
DE Hexon protein (Late protein 2).
GN PII.
OS Canine adenovirus type 1 (strain CLL).
CC Viruses; dsDNA viruses, no RNA stage; Adenoviridae; Mastadenovirus.
CX NCBI_TaxID=69150;
RN [-]
RP SEQUENCE FROM N.A.
RA Campbell J.B., Zhao Y.;
RL Submitted (AUG-1996) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: This protein is one of the structural proteins in the
CC viral coat and is synthesized during late infection.
CC -!- SUBUNIT: Homotrimer (By similarity).
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U55001; AAB05443.1; -.
CC HSSP; P03277; 1DHX.
CC InterPro; IPR000736; Adeno_hexon.
CC Pfam; PF01065; Adeno_hexon; 1.
CC Pfam; PF03678; Adeno_hexon; 1.
CC ProDom; PD002815; Adeno_hexon; 1.
CC Coa protein; Hexon protein; Late protein.
CC SEQUENCE 905 AA; 101353 MW; 6F95A0C1B51B10CA CRC64;

Query Match 3.8%; Score 7; DB 1; Length 905;
Best Local Similarity 100.0%; Pred.No. 75;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 EPQLGPE 8
Db 170 EPQLGPE 176

RESULT 34
HEX_ADECR
ID HEX_ADECR STANDARD; PRT; 905 AA.
AC O39619;
DT 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 37, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE Hexon protein (Late protein 2).
GN PII.
OS Canine adenovirus type 1 (strain RI261).
CC Viruses; dsDNA viruses, no RNA stage; Adenoviridae; Mastadenovirus.
CX NCBI_TaxID=69151;
RN [-]
```

```
RP SEQUENCE FROM N.A.
RX MEDLINE=97275900; PubMed=9129661;
RA Morrison M.D., Onions D.E., Nicolson L.;
RT "Complete DNA sequence of canine adenovirus type 1.";
RL J. Gen. Virol. 78:873-878(1997).
CC -!- FUNCTION: This protein is one of the structural proteins in the
CC viral coat and is synthesized during late infection.
CC -!- SUBUNIT: Homotrimer (By similarity).
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; Y07760; CAA69066.1; -.
CC HSSP; P03277; 1DHX.
CC InterPro; IPR000736; Adeno_hexon.
CC Pfam; PF01065; Adeno_hexon; 1.
CC Pfam; PF03678; Adeno_hexon; 1.
CC ProDom; PD002815; Adeno_hexon; 1.
CC Coa protein; Hexon protein; Late protein.
CC SEQUENCE 905 AA; 101357 MW; 3F59D874B8CA0FA3 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 905;
Best Local Similarity 100.0%; Pred.No. 75;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 EPQLGPE 8
Db 170 EPQLGPE 176

RESULT 35
NFC1_HUMAN
ID NFC1_HUMAN STANDARD; PRT; 943 AA.
AC O95644; Q12865; Q15793;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Nuclear factor of activated T-cells, cytoplasmic 1 (NFAT transcription
DE complex cytosolic component) (NF-ATc1) (NF-ATc).
GN NFATC1 OR NFATC OR NFAT2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM A-ALPHA).
RC TISSUE=Peripheral blood lymphocytes, and T-cell;
RX MEDLINE=94261186; PubMed=8202141;
RA Northrop J.P., Ho S.N., Chen L., Thomas D.J., Timmerman L.A.,
RA Nolan G.P., Admon A., Crabtree G.R.;
RT "NF-AT components define a family of transcription factors targeted in
RT T-cell activation.";
RL Nature 369:497-502(1994).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM B-BETA).
RC TISSUE=B-cell;
RX MEDLINE=96355439; PubMed=8702849;
RA Park J., Takeuchi A., Sharma S.;
RT "Characterization of a new isoform of the NFAT (nuclear factor of
RT activated T cells) gene family member NFATc.";
RL J. Biol. Chem. 271:20914-20921(1996).
RN [3]
RP ERRATUM.
RA Park J., Takeuchi A., Sharma S.;
RL J. Biol. Chem. 271:33705-33705(1996).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORMS A-ALPHA; B-ALPHA AND C-BETA).
RC TISSUE=B-cell lymphoma;
```

RX MEDLINE=99170294; PubMed=10072078;
RA Chuvpilo S., Zimmer M., Kerstan A., Gloeckner J., Avots A., Escher C.,
RA Fischer C., Inashkina I., Jankevics E., Berberich-Siebelt F.,
RA Schmitt E., Serfling E.;
RT "Alternative polyadenylation events contribute to the induction of
RT NF-ATc in effector T cells.";
RL Immunity 10:261-269(1999).
RN [5]
RP MUTAGENESIS.
RX MEDLINE=20119316; PubMed=10652349;
RA Porter C.M., Havens M.A., Clipstone N.A.;
RT "Identification of amino acid residues and protein kinases involved in
RT the regulation of NFATc subcellular localization.";
RL J. Biol. Chem. 275:3543-3551(2000).
RN [6]
RP ALTERNATIVE SPLICING, AND CHARACTERIZATION.
RX MEDLINE=99288090; PubMed=10358178;
RA Chuvpilo S., Avots A., Berberich-Siebelt F., Gloeckner J., Fischer C.,
RA Kerstan A., Escher C., Inashkina I., Hlubek F., Jankevics E.,
RA Brabletz C., Serfling E.;
RT "Multiple NF-ATc isoforms with individual transcriptional properties
RT are synthesized in T lymphocytes.";
RL J. Immunol. 162:7294-7301(1999).
RN [7]
RP REVIEW.
RX MEDLINE=99189746; PubMed=10089876;
RA Crabtree G.R.;
RT "Generic signals and specific outcomes: signaling through Ca2+,
RT calcineurin, and NF-AT.";
RL Cell 96:611-614(1999).
CC -!- FUNCTION: Plays a role in the inducible expression of cytokine
CC genes in T cells, especially in the induction of the IL-2 or IL-4
CC gene transcription. Also control gene expression in embryonic
CC cardiac cells. Could regulate not only the activation and
CC proliferation but also the differentiation and programmed death of
CC T-lymphocytes as well as lymphoid and non-lymphoid cells.
CC -!- SUBUNIT: Member of the multicomponent NFATC transcription complex
CC that consists of at least two components, a pre-existing
CC cytoplasmic component NFATC2 and an inducible nuclear component
CC NFATC1. Other members such as NFATC4, NFATC3 or members of the
CC activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind
CC the complex. NFATC proteins bind to DNA as monomers.
CC -!- SUBCELLULAR LOCATION: Cytoplasmic for the phosphorylated form and
CC nuclear after activation that is controlled by calcineurin-
CC mediated dephosphorylation. Rapid nuclear exit of NFATC is thought
CC to be one mechanism by which cells distinguish between sustained
CC and transient calcium signals. The subcellular localization of
CC NFATC play a key role in the gene transcription.
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=6;
CC Comment=Isoform C-alpha and isoform C-beta are the strongest
CC activator of gene transcription, followed by isoform A-alpha and
CC isoform A-beta, whereas isoform B-alpha and isoform B-beta are
CC the weakest. Isoform B-alpha, isoform B-beta, isoform C-alpha
CC and isoform C-beta, both present in T-cells, can modulate their
CC transcriptional activity;
CC Name=C-alpha;
CC IsoId=095644-1; Sequence=Displayed;
CC Note=An additional isoform may be produced by alternative
CC initiation at Met-37 of isoform C-alpha;
CC Name=A-alpha;
CC IsoId=095644-2; Sequence=VSP_005591, VSP_005592;
CC Note=An additional isoform may be produced by alternative
CC initiation at Met-37 of isoform A-alpha;
CC Name=A-beta;
CC IsoId=095644-3; Sequence=VSP_005590, VSP_005591, VSP_005592;
CC Name=B-alpha;
CC IsoId=095644-4; Sequence=VSP_005593;
CC Note=An additional isoform may be produced by alternative
CC initiation at Met-37 of isoform B-alpha;
CC Name=B-beta;
CC IsoId=095644-5; Sequence=VSP_005590, VSP_005593;
CC Name=C-beta;

CC IsoId=095644-6; Sequence=VSP_005590;
CC Event=Alternative initiation;
CC Comment=6 isoforms may be produced by alternative initiation at
CC Met-1 and Met-37 of alpha-type isoforms;
CC -!- TISSUE SPECIFICITY: Expressed in thymus, peripheral leukocytes as
CC T-cells and spleen. Isoforms A are preferentially expressed in
CC effector T-cells (thymus and peripheral leukocytes) whereas
CC isoforms B and isoforms C are preferentially expressed in naive T-
CC cells (spleen). Isoforms B are expressed in naive T-cells after
CC first antigen exposure and isoforms A are expressed in effector T-
CC cells after second antigen exposure.
CC -!- INDUCTION: Only isoforms A are inducibly expressed in T
CC lymphocytes upon activation of the T-cell receptor (TCR) complex.
CC Induced after co-addition of phorbol 12-myristate 13-acetate (PMA)
CC and ionomycin. Also induced after co-addition of 12-O-
CC tetradecanoylphorbol-13-acetate (TPA) and ionomycin. Weakly
CC induced with PMA, ionomycin and cyclosporin A.
CC -!- DOMAIN: Rel Similarity Domain (RSD) allows DNA-binding and
CC cooperative interactions with AP1 factors.
CC -!- DOMAIN: The N-terminal transactivation domain (TAD-A) binds to and
CC is activated by Cbp/p300. The dephosphorylated form contains two
CC unmasked nuclear localization signals (NLS), which allow
CC translocation of the protein to the nucleus.
CC -!- DOMAIN: Isoforms C have a C-terminal part with an additional
CC trans-activation domain, TAD-B, which acts as a transcriptional
CC activator. Isoforms B have a shorter C-terminal part without
CC complete TAD-B which acts as a transcriptional repressor.
CC -!- PTM: Phosphorylated by NFATC-kinase; dephosphorylated by
CC calcineurin.
CC -!- SIMILARITY: Belongs to the Rel/Dorsal family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U08015; AAA19601.1; --
CC EMBL; U59736; AAC50869.1; --
CC EMBL; U80917; AAD00450.1; --
CC EMBL; U80918; AAD00451.1; --
CC EMBL; U80919; AAD00452.1; --
CC PDB; 1A66; 17-JUN-98.
CC PDB; 1NFA; 01-APR-97.
CC TRANSFAC; T01945; --
CC TRANSFAC; T05544; --
CC TRANSFAC; T05545; --
CC Genew; HGNC:7775; NFATC1.
CC MIM; 600489; --
CC GO; GO:0005737; C:cytoplasm; TAS.
CC GO; GO:0005528; F:FK506 binding; TAS.
CC GO; GO:0003700; F:transcription factor activity; TAS.
CC GO; GO:0006366; P:transcription from Pol II promoter; TAS.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR002909; IPT_TIG.
CC InterPro; IPR000451; NF_Rel_dor.
CC InterPro; IPR008366; NFAT.
CC InterPro; IPR008967; P53-like.
CC Pfam; PF00554; RHD; 1.
CC Pfam; PF01833; TIG; 1.
CC PRINTS; PR01789; NUCFACTORATC.
CC SMART; SM00429; IPT; 1.
CC PROSITE; PS01204; REL_1; FALSE_NEG.
CC PROSITE; PS0254; REL_2; 1.
CC Transcription regulation; Activator; Repressor; Nuclear protein;
CC DNA-binding; Alternative initiation; Alternative splicing;
CC Phosphorylation; Repeat; 3D-structure.
CC CHAIN 1 943 NUCLEAR FACTOR OF ACTIVATED T-CELLS,
CC CYTOPLASMIC 1.
CC CHAIN 37 943 NUCLEAR FACTOR OF ACTIVATED T-CELLS,
CC CYTOPLASMIC 1, ALPHA-TYPE ISOFORMS.
FT FT

FT INIT MET 37 37 FOR ALPHA-TYPE ISOFORMS.
FT DOMAIN 118 123 CALCINEURIN-BINDING.
FT DOMAIN 126 218 TRANS-ACTIVATION DOMAIN A (TAD-A).
FT DOMAIN 203 298 3 X SP REPEATS.
FT REPEAT 203 219 1.
FT REPEAT 233 249 2.
FT REPEAT 282 298 3.
FT DOMAIN 265 267 NUCLEAR LOCALIZATION SIGNAL.
FT DOMAIN 310 321 NUCLEAR EXPORT SIGNAL.
FT DOMAIN 439 446 DNA-BINDING.
FT DOMAIN 682 684 NUCLEAR LOCALIZATION SIGNAL.
FT DOMAIN 703 943 TRANS-ACTIVATION DOMAIN B (TAD-B).
FT DOMAIN 924 933 NUCLEAR EXPORT SIGNAL.
FT MOD RES 117 117 PHOSPHORYLATION.
FT VARSPLOC 1 42 MPSTSFVPFSPKFPPLGPAAAVFGRGETLGPAPRAGGTMKSAE
E -> MTGLEQDFDFEFLFEFNQRDEGAAAAAP (in
isoform A-beta, isoform B-beta and
isoform C-beta).

Query Match 3.8%; Score 7; DB 1; Length 943;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 36
CLMN MOUSE STANDARD; PRT; 1052 AA.
ID Q8C5W0; Q91V71; Q91XT7; Q91XT8; Q91XU9;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Calmin.
GN CLMN.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2; 3 AND 4), SUBCELLULAR LOCATION,
RP AND TISSUE SPECIFICITY.
RC STRAIN=ICR; TISSUE=Brain, and Testis;
RX MEDLINE=21280911; PubMed=11386753;
RA Ishisaki Z., Takaishi M., Furuta I., Huh N.-H.;
RT "Calmin, a protein with calponin homology and transmembrane domains
expressed in maturing spermatogenic cells.";
RL Genomics 74:172-179(2001).
RN [2]
RP SEQUENCE OF 98-1052 FROM N.A. (ISOFORM 1).
RC STRAIN=C57BL/6J; TISSUE=Testis;
RX MEDLINE=22354683; PubMed=12466851;
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaide I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedierski R.M., King B.L.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,

RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.;
RT *Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.*;
RL Nature 420:563-573(2002).
RN [3]
RP TISSUE SPECIFICITY.
RX MEDLINE=22557181; PubMed=12670712;
RA Takaishi M., Ishisaki Z., Yoshida T., Takata Y., Huh N.-H.;
RT *Expression of calmin, a novel developmentally regulated brain
protein with calponin-homology domains.*;
RL Brain Res. Mol. Brain Res. 112:146-152(2003).
CC -!- SUBCELLULAR LOCATION: Type IV membrane protein (potential).
CC Cytoplasmic. Isoforms 1 and isoform 4 show a reticular pattern in
the cytoplasm.
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=4;
CC Name=1; Synonyms=Beta;
CC IsoId=Q8C5W0-1; Sequence=Displayed;
CC Name=2; Synonyms=Delta;
CC IsoId=Q8C5W0-2; Sequence=VSP_007766, VSP_007767;
CC Note=Lacks the transmembrane domain;
CC Name=3; Synonyms=Gamma;
CC IsoId=Q8C5W0-3; Sequence=VSP_007768, VSP_007769;
CC Note=Lacks the transmembrane domain;
CC Name=4; Synonyms=Alpha;
CC IsoId=Q8C5W0-4; Sequence=VSP_007770;
CC -!- TISSUE SPECIFICITY: Expressed in testis. Expressed during testis
maturation process and in maturing spermatids. In brain, it is
expressed in neurons of the hippocampus, cerebral cortex, and
thalamus, Purkinje cells, and also in the choroid plexus and
ependymal cells. Expressed predominantly in dendrites and cell
bodies of the neurons, but not in axons. The level of expression
increases during the period of maturation of the mouse brain after
birth.
CC -!- SIMILARITY: Contains 1 actin-binding domain.
CC -!- SIMILARITY: Contains 2 calponin-homology (CH) domains.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL Outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AB047978; BAB59009.1; -
CC EMBL; AB059643; BAB59120.1; -
CC EMBL; AB059644; BAB59121.1; -
CC EMBL; AB059645; BAB59122.1; -
CC EMBL; AB059646; BAB59123.1; -
CC EMBL; AB059647; BAB59124.1; -
CC EMBL; AB059648; BAB59125.1; -
CC MGD; MGI:2136957; Clmn.
CC GO; GO:0005737; C:cytoplasm; IDA.
CC InterPro; IPR001589; Actbind_actnin.
CC InterPro; IPR001715; Calponin-like.
CC Pfam; PF00307; CH; 2.
CC SMART; SM00033; CH; 2.
CC PROSITE; PS00019; ACTININ_1; 1.
CC PROSITE; PS00020; ACTININ_2; 1.
CC PROSITE; PS50021; CH; 2.
KW Actin-binding; Repeat; Transmembrane; Alternative splicing.
FT TRANSMEM 1027 1047 ANCHOR FOR TYPE IV MEMBRANE PROTEIN
(POTENTIAL).
FT DOMAIN 1 283
FT DOMAIN 1 139 CH 1.


```
FT DOMAIN 187 288 CH 2.
FT VARSPLIC 922 927 NSHSDS -> TVIPEL (in isoform 2).
FT /FTid=VSP 007766.
FT VARSPLIC 928 1052 Missing (in isoform 2).
FT /FTid=VSP 007767.
FT VARSPLIC 942 946 DHFSY -> SFHLY (in isoform 3).
FT /FTid=VSP 007768.
FT VARSPLIC 947 1052 Missing (in isoform 3).
FT /FTid=VSP 007769.
FT VARSPLIC 966 996 Missing (in isoform 4).
FT /FTid=VSP 007770.
FT CONFLICT 170 170 MISSING (IN REF. 2).
FT CONFLICT 1012 1012 S -> R (IN REF. 2).
SQ SEQUENCE 1052 AA; 117226 MW; A5AD7D3FF99A6E86 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 1052;
Best Local Similarity 100.0%; Pred. No. 86;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 27 SCSPSLP 33
Db 797 SCSPSLP 803

RESULT 37
RTN4_RAT
ID RTN4_RAT STANDARD; Q9R0D9; Q9WUE9; Q9WUE9; PRT; 1163 AA.
AC Q9JKL1; Q9JKL10; Q9R0D9; Q9WUE9; Q9WUE9;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Reticulon 4 (Neurite outgrowth inhibitor) (Nogo protein) (Foccen)
DE (Glut4 vesicle 20 kDa protein).
GN RTN4 OR NOGO.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM 3), AND PARTIAL SEQUENCE.
RC STRAIN=Sprague-Dawley; TISSUE=Adipocyte;
RX MEDLINE=99249816; PubMed=10231557;
RA Morris N.J., Ross S.A., Neveu J.M., Lane W.S., Lienhard G.E.;
RT "Cloning and characterization of a 22 kDa protein from rat adipocytes:
R a new member of the reticulon family."
RL Biochim. Biophys. Acta 1450:68-76(1999).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
RX MEDLINE=20129258; PubMed=10667796;
RA Chen M.S., Huber A.B., Van der Haar M.E., Frank M., Schnell L.,
RA Spillmann A.A., Christ F., Schwab M.E.;
RT "Nogo-A is a myelin-associated neurite outgrowth inhibitor and an
RT antigen for monoclonal antibody IN-1."
RL Nature 403:434-439(2000).
RN [3]
RP SEQUENCE FROM N.A. (ISOFORMS 2 AND 4).
RC STRAIN=Wistar Kyoto; TISSUE=Vascular smooth muscle;
RA Ito T., Schwartz S.M.;
RT "Cloning of a member of the reticulon gene family in rat: one of two
RT minor splice variants."
RL Submitted (FEB-1999) to the EMBL/GenBank/DBJ databases.
RN [4]
RP FUNCTION.
RX MEDLINE=22033691; PubMed=12037567;
RA GrandPre T., Li S., Strittmatter S.M.;
RT "Nogo-66 receptor antagonist peptide promotes axonal regeneration."
RL Nature 417:547-551(2002).
CC -!- FUNCTION: Potent neurite outgrowth inhibitor which may also help
CC block the regeneration of the nervous central system in adults (By
CC similarity).
CC -!- SUBUNIT: Binds to RTN4R. Interacts with Bcl-xl and Bcl-2 (By
CC similarity).
CC -!- SUBCELLULAR LOCATION: Integral membrane protein. Anchored to the
```

```
CC membrane of the endoplasmic reticulum through 2 putative
CC transmembrane domains (By similarity).
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=4;
CC Name=1; Synonyms=Nogo-A, NL-220-250;
CC IsoId=Q9JKL1-1; Sequence=Displayed;
CC Name=2; Synonyms=Nogo-B, Foccen-M1;
CC IsoId=Q9JKL1-2; Sequence=VSP_005658;
CC Name=3; Synonyms=Nogo-C, VP20;
CC IsoId=Q9JKL1-3; Sequence=VSP_005656, VSP_005657;
CC Name=4; Synonyms=Foccen-M2;
CC IsoId=Q9JKL1-4; Sequence=VSP_005659;
CC -!- TISSUE SPECIFICITY: Isoforms 1, 2 and 3 are present in optic
CC nerve, spinal cord and cerebral cortex. Isoforms 1 and 2 are
CC present in dorsal root ganglion, sciatic nerve and PC12 cells
CC after longer exposure. Isoforms 2 and 3 are detected in kidney,
CC cartilage, skin, lung and spleen. Isoform 3 is expressed at high
CC level in skeletal muscle. In adult animals isoform 1 is expressed
CC mainly in the nervous system.
CC -!- SIMILARITY: Contains 1 reticulon domain.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF051335; AAF01564.1; -
CC EMBL; AJ242961; CAB71027.1; -
CC EMBL; AJ242962; CAB71028.1; -
CC EMBL; AJ242963; CAB71029.1; -
CC EMBL; AF132045; AAD31019.1; -
CC EMBL; AF132046; AAD31020.1; -
CC GO; GO:0030176; C:integral to endoplasmic reticulum membrane; IDA.
CC GO; GO:0005635; C:nuclear membrane; ISS.
CC GO; GO:0005515; F:protein binding; ISS.
CC GO; GO:0019987; P:negative regulation of anti-apoptosis; ISS.
CC GO; GO:0030517; P:negative regulation of axon extension; ISS.
CC InterPro; IPR003388; Reticulon.
CC Pfam; PF02453; Reticulon; 1.
CC PROSITE; PS50845; RETICULON; 1.
CC Endoplasmic reticulum; Alternative splicing; Transmembrane.
FT DOMAIN 1 989 CYTOPLASMIC (Potential).
FT TRANSMEM 990 1010 POTENTIAL.
FT DOMAIN 1011 1104 LUMENAL (Potential).
FT TRANSMEM 1105 1125 POTENTIAL.
FT DOMAIN 1126 1163 CYTOPLASMIC (Potential).
FT DOMAIN 976 1163 RETICULON.
FT DOMAIN 33 46 POLY-GLU.
FT DOMAIN 73 76 POLY-ALA.
FT DOMAIN 140 145 POLY-PRO.
FT VARSPLIC 1 964 Missing (in isoform 3).
FT /FTid=VSP 005656.
FT VARSPLIC 965 975 AVLSAELSKTS -> MDGQKHKWKD (in isoform
FT 3).
FT /FTid=VSP 005657.
FT VARSPLIC 173 975 Missing (in isoform 2).
FT /FTid=VSP 005658.
FT VARSPLIC 192 975 Missing (in isoform 4).
FT /FTid=VSP 005659.
FT CONFLICT 1130 1131 MISSING (IN REF. 3; AAD31020).
SQ SEQUENCE 1163 AA; 126386 MW; 8CB894B09E94F0B6 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 1163;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 160 LTPDLVQ 166
Db 527 LTPDLVQ 533
```

RESULT 38
RTN4 HUMAN
ID RTN4 HUMAN STANDARD; PRT; 1192 AA.
AC Q9NQC3; Q94962; Q9BXG5; Q9H212; Q9H313; Q9UQ42; Q9Y293; Q9Y2Y7;
AC Q9Y5U6;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Reticulon 4 (Neurite outgrowth inhibitor) (Nogo protein) (Foocen)
DE (Neuroendocrine-specific protein) (NSP) (Neuroendocrine specific
DE protein C homolog) (RTN-x) (Reticulon 5) (My043 protein).
GN RTN4 OR NOGO OR ASY OR KIAA0886.
OS Homo sapiens (Human).
CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
CX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
RX MEDLINE=20129242; PubMed=10667780;
RA Prinjha R., Moore S.E., Vinson M., Blake S., Morrow R., Christie G.,
RA Michalovich D., Simmons D.L., Walsh F.S.;
RT "Inhibitor of neurite outgrowth in humans.";
RL Nature 403:383-384(2000).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).
RC TISSUE=Brain;
RX MEDLINE=21010696; PubMed=11126360;
RA Tagami S., Eguchi Y., Kinoshita M., Takeda M., Tsujimoto Y.;
RT "A novel protein, RTN-XS, interacts with both Bcl-XL and Bcl-2 on
RT endoplasmic reticulum and reduces their anti-apoptotic activity.";
RL Oncogene 19:5736-5746(2000).
RN [3]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
RX MEDLINE=20237542; PubMed=10773680;
RA Yang J., Yu L., Bi A.D., Zhao S.-Y.;
RT "Assignment of the human reticulon 4 gene (RTN4) to chromosome
RT 2p14-->2p13 by radiation hybrid mapping.";
RL Cytogenet. Cell Genet. 88:101-102(2000).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORM 4).
RA Jin W.-L., Ju G.;
RT "Developmentally-regulated alternative splicing in a novel Nogo-A.";
RL Submitted (NOV-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A. (ISOFORMS 2 AND 3).
RC TISSUE=Placenta, and Skeletal muscle;
RA Ito T., Schwartz S.M.;
RT "Cloning of a member of the reticulon gene family in human.";
RL Submitted (FEB-1999) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A. (ISOFORM 2).
RC TISSUE=Fibroblast;
RA Yutsudo M.;
RT "Isolation of a cell death-inducing gene.";
RL Submitted (JUN-1998) to the EMBL/GenBank/DBJ databases.
RN [7]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RC TISSUE=Pituitary;
RA Song H., Peng Y., Zhou J., Huang Q., Dai M., Mao Y.M., Yu Y., Xu X.,
RA Luo B., Hu R., Chen J.;
RT "Human neuroendocrine-specific protein C (NSP) homolog gene.";
RL Submitted (JUL-1998) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RA Gu J.R., Wan D.F., Zhao X.T., Zhou X.M., Jiang H.Q., Zhang P.P.,
RA Qin W.X., Huang Y., Qiu X.K., Qian L.F., He L.P., Li H.N., Yu Y.,
RA Yu J., Han L.H.;
RT "Novel human cDNA clone with function of inhibiting cancer cell
RT growth.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
RN [9]
RP SEQUENCE FROM N.A. (ISOFORM 1).

RC TISSUE=Brain;
RX MEDLINE=99156230; PubMed=10048485;
RA Nagase T., Ishikawa K.-I., Suyama M., Kikuno R., Hirokawa M.,
RA Miyajima N., Tanaka A., Kotani H., Nomura N., Ohara O.;
RT "Prediction of the coding sequences of unidentified human genes. XII.
RT The complete sequences of 100 new cDNA clones from brain which code
RT for large proteins in vitro.";
RL DNA Res. 5:355-364(1998).
RN [10]
RP SEQUENCE FROM N.A. (ISOFORMS 2 AND 3).
RC TISSUE=Brain, Ovary, Pancreas, Placenta, and Skeletal muscle;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano M.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [11]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RX MEDLINE=20499367; PubMed=11042152;
RA Zhang Q.-H., Ye M., Wu X.-Y., Ren S.-X., Zhao M., Zhao C.-J., Fu G.,
RA Shen Y., Fan H.-Y., Lu G., Zhong M., Xu X.-R., Han Z.-G., Zhang J.-W.,
RA Tao J., Huang Q.-H., Zhou J., Hu G.-X., Gu J., Chen S.-J., Chen Z.;
RT "Cloning and functional analysis of cDNAs with open reading frames for
RT 300 previously undefined genes expressed in CD34+ hematopoietic
RT stem/progenitor cells.";
RL Genome Res. 10:1546-1560(2000).
RN [12]
RP SEQUENCE OF 482-1192 FROM N.A. (ISOFORM 1/4).
RC TISSUE=Brain;
RA Mao Y.M., Xie Y., Zheng Z.H.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
RN [13]
RP SEQUENCE OF 186-1192 FROM N.A. (ISOFORM 1).
RC TISSUE=Testis;
RA Sha J.H., Zhou Z.M., Li J.M.;
RL Submitted (JAN-2001) to the EMBL/GenBank/DBJ databases.
RN [14]
RP TOPOLOGY.
RC TISSUE=Brain;
RX MEDLINE=20129259; PubMed=10667797;
RA GrandPre T., Nakamura F., Vartanian T., Strittmatter S.M.;
RT "Identification of the Nogo inhibitor of axon regeneration as a
RT Reticulon protein.";
RL Nature 403:439-444(2000).
RN [15]
RP FUNCTION.
RC TISSUE=Brain;
RX MEDLINE=21069055; PubMed=11201742;
RA Fournier A.E., Grandpre T., Strittmatter S.M.;
RT "Identification of a receptor mediating Nogo-66 inhibition of axonal
RT regeneration.";
RL Nature 409:341-346(2001).
RN [16]
RP REVIEW.
RX MEDLINE=21888956; PubMed=11891768;
RA Ng C.E.L., Tang B.L.;
RT "Nogos and the Nogo-66 receptor: factors inhibiting CNS neuron

RT regeneration.";
RL J. Neurosci. Res. 67:559-565 (2002).
CC -!- FUNCTION: Potent neurite outgrowth inhibitor which may also help
CC block the regeneration of the nervous central system in adults.
CC Isoform 2 reduces the anti-apoptotic activity of Bcl-x1 and Bcl-2.
CC This is likely consecutive to their change in subcellular
CC location, from the mitochondria to the endoplasmic reticulum,
CC after binding and sequestration.
CC -!- SUBUNIT: Binds to RTN4R. Interacts with Bcl-x1 and Bcl-2.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein. Endoplasmic
CC reticulum. Anchored to the membrane of the endoplasmic reticulum
CC through 2 putative transmembrane domains.
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=4;
CC Name=1; Synonyms=RTN 4A, Nogo-A, RTN-XL;
CC IsoId=Q9NQC3-1; Sequence=Displayed;
CC Name=2; Synonyms=RTN 4B, Nogo-B, RTN-XS, Foocon-M;
CC IsoId=Q9NQC3-2; Sequence=VSP_005655;
CC Name=3; Synonyms=RTN 4C, Nogo-C, Foocon-S;
CC IsoId=Q9NQC3-3; Sequence=VSP_005652, VSP_005653;
CC Name=4;
CC IsoId=Q9NQC3-4; Sequence=VSP_005654;
CC -!- TISSUE SPECIFICITY: Isoform 1 is specifically expressed in brain
CC and testis and weakly in heart and skeletal muscle. Isoform 2 is
CC widely expressed excepted for the liver. Isoform 3 is expressed in
CC brain, skeletal muscle and adipocytes. Isoform 4 is testis-
CC specific.
CC -!- SIMILARITY: Contains 1 reticulon domain.
CC -!- CAUTION: Ref.11 sequence differs from that shown due to
CC frameshifts in positions 1149 and 1156.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AJ251383; CAB99248.1; --
DR EMBL; AJ251384; CAB99249.1; --
DR EMBL; AJ251385; CAB99250.1; --
DR EMBL; AB040462; BAB18927.1; --
DR EMBL; AB040463; BAB18928.1; --
DR EMBL; AF148537; AAG12176.1; --
DR EMBL; AF148538; AAG12177.1; --
DR EMBL; AF087901; AAG12205.1; --
DR EMBL; AF320999; AAG40878.1; --
DR EMBL; AF132047; AAD31021.1; --
DR EMBL; AF132048; AAD31022.1; --
DR EMBL; AB015639; BAA83712.1; --
DR EMBL; AF077050; AAD27783.1; --
DR EMBL; AF177332; AAG17976.1; --
DR EMBL; AB020693; BAA74309.1; --
DR EMBL; BC001035; AAH01035.1; --
DR EMBL; BC007109; AAH07109.1; --
DR EMBL; BC014366; AAH14366.1; --

Query Match 3.8%; Score 7; DB 1; Length 1192;
Best Local Similarity 100.0%; Pred. No. 96;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 160 LTPDLVQ 166
|||
Db 550 LTPDLVQ 556

RESULT 39

UB4B_HUMAN STANDARD; PRT; 1302 AA.
AC Q95155; O75169; Q95338; Q96QD4; Q9BY17;
DT 28-FEB-2003 (Rel. 41, Created)
JT 28-FEB-2003 (Rel. 41, Last sequence update)

DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Ubiquitin conjugation factor E4 B (Ubiquitin-fusion degradation
DE protein 2) (Homologously deleted in neuroblastoma-1).
GN UB34B OR UFD2 OR HDNB1 OR KIAA0684.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM 2), TISSUE SPECIFICITY, MUTAGENESIS OF
RP ASP-109; ASP-121 AND ASP-123, AND CLEAVAGE BY CASPASES.
RX MEDLINE=21661475; PubMed=11802788;
RA Mahoney J.A., Odin J.A., White S.M., Shaffer D., Koff A.,
RA Casciola-Rosen L., Rosen A.;
RT "The human homologue of the yeast polyubiquitination factor Ufd2p is
RT cleaved by caspase 6 and granzyme B during apoptosis.";
RL Biochem. J. 361:587-595 (2002).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM 1).
RC TISSUE=Brain;
RA Lubyova B., Onyango P., Kurzbaue R., Lummerstorfer J.A., Kleiner E.,
RA Gardellin P., Willhoeft U., Weith A.;
RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A. (ISOFORM 2).
RC TISSUE=Substantia nigra;
RA Kageyama H., Ohira M., Nakagawara A.;
RT "Human ubiquitination factor E4/UFD2.";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RA Martin S.;
RL Submitted (JUN-2001) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE OF 102-1302 FROM N.A. (ISOFORM 2).
RC TISSUE=Brain;
RX MEDLINE=98403880; PubMed=9734811;
RA Ishikawa K.-I., Nagase T., Suyama M., Miyajima N., Tanaka A.,
RA Kotani H., Nomura N., Ohara O.;
RT "Prediction of the coding sequences of unidentified human genes. X.
RT The complete sequences of 100 new cDNA clones from brain which can
RL code for large proteins in vitro.";
RN [6]
RP SEQUENCE OF 1112-1302 FROM N.A.
RA Barrow I.K.-P., Boguski M.S., Touchman J., Spencer F.;
RL Submitted (AUG-1998) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: Binds to the ubiquitin moieties of preformed conjugates
CC and catalyzes ubiquitin chain assembly in conjunction with E1, E2,
CC and E3 (By similarity).
CC -!- SUBUNIT: Interacts with Vcp (By similarity).
CC -!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=3;
CC Name=1;
CC IsoId=Q95155-1; Sequence=Displayed;
CC Name=2;
CC IsoId=Q95155-2; Sequence=VSP_007102;
CC Name=3;
CC IsoId=Q95155-3; Sequence=VSP_007101, VSP_007102, VSP_007103;
CC Note=No experimental confirmation available;
CC -!- TISSUE SPECIFICITY: Highest expression in ovary, testis, heart and
CC skeletal muscle. Expression is low in colon, thymus and peripheral
CC blood leukocytes. Almost undetectable in lung and spleen.
CC -!- PTM: Proteolytically cleaved by caspases during apoptosis. Cleaved
CC efficiently at Asp-123 by caspase-6 and granzyme B. Cleaved with
CC approximately 10-fold less efficiency at Asp-109 by caspase-3 and
CC caspase-7.
CC -!- SIMILARITY: BELONGS TO THE UBIQUITIN CONJUGATION FACTOR E4 FAMILY.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its


```

ID  ATP8_EQUAS      STANDARD;          PRT;          67 AA.
AC  P92479;
DT  15-JUL-1998 (Rel. 36, Created)
DT  15-JUL-1998 (Rel. 36, Last sequence update)
DT  10-OCT-2003 (Rel. 42, Last annotation update)
DE  ATP synthase protein 8 (EC 3.6.3.14) (ATPase subunit 8) (A6L).
GN  MTATP8 OR ATP8.
OS  Equus asinus (Donkey).
OG  Mitochondrion.
OC  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC  Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OX  NCBI_TaxID=9793;
RN  [1]
RP  SEQUENCE FROM N.A.
RC  TISSUE=Kidney;
RX  MEDLINE=97032591; PubMed=8875857;
RA  Xu X., Gullberg A., Arnason U.;
RT  "The complete mitochondrial DNA (mtDNA) of the donkey and mtDNA
RT  comparisons among four closely related mammalian species-pairs.";
RL  J. Mol. Evol. 43:438-463(1996).
CC  -!- FUNCTION: This is one of the chains of the nonenzymatic component
CC  (CF(0) subunit) of the mitochondrial ATPase complex.
CC  -!- CATALYTIC ACTIVITY: ATP + H(2)O + H(+) [in] = ADP + phosphate +
CC  H(+)(Out).
CC  -!- SUBCELLULAR LOCATION: Membrane-bound.
CC  -!- SIMILARITY: Belongs to the ATPase protein 8 family.
-----
This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
-----
EMBL; X97337; CAA66018.1; -.
DR  PIR; T11367; T11367.
DR  InterPro; IPR001421; ATPase8_mit.
DR  InterPro; IPR003238; Mamm_MATPases.
DR  Pfam; PF003895; ATP-synt_8; 1.
DR  ProDom; PDC01090; Mamm_MATPase8; 1.
KW  Hydrogen ion transport; CF(0); Mitochondrion; Transmembrane.
FT  TRANSMEM 8 24 POTENTIAL.
SQ  SEQUENCE 67 AA; 7908 MW; AE77B87483064A70 CRC64;

Query Match          3.3%; Score 6; DB 1; Length 67;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  157 AKRLTP 162
Db  45 AKRLTP 50

RESULT 42
VE5_HPV58
ID  VE5_HPV58      STANDARD;          PRT;          76 AA.
AC  P26552;
DT  01-AUG-1992 (Rel. 23, Created)
DT  01-AUG-1992 (Rel. 23, Last sequence update)
DT  01-OCT-1996 (Rel. 34, Last annotation update)
DE  Probable E5 protein.
GN  E5.
OS  Human papillomavirus type 58.
OC  Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
OC  Papillomavirus.
OX  NCBI_TaxID=10598;
RN  [1]
RP  SEQUENCE FROM N.A.
RX  MEDLINE=92024102; PubMed=1656594;
RA  Kirii Y., Iwamoto S., Matsukura T.;
RT  "Human papillomavirus type 58 DNA sequence.";
RL  Virology 185:424-427(1991).

```

```

CC  This SWISS-PROT entry is copyright. It is produced through a collaboration
CC  between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC  the European Bioinformatics Institute. There are no restrictions on its
CC  use by non-profit institutions as long as its content is in no way
CC  modified and this statement is not removed. Usage by and for commercial
CC  entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC  or send an email to license@isb-sib.ch).
-----
EMBL; D90400; BAA31849.1; -.
DR  PIR; D36779; W5WL58.
DR  InterPro; IPR004270; Papilloma_E5.
DR  Pfam; PF03025; Papilloma_E5; 1.
KW  Early protein.
SQ  SEQUENCE 76 AA; 8953 MW; C4B6E29BC1D6BA76 CRC64;

Query Match          3.3%; Score 6; DB 1; Length 76;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  19 LLLWVS 24
Db  38 LLLWVS 43

RESULT 43
NTPL_SPVKA
ID  NTPL_SPVKA     STANDARD;          PRT;          89 AA.
AC  Q08513;
DT  01-OCT-1994 (Rel. 30, Created)
DT  01-OCT-1994 (Rel. 30, Last sequence update)
DT  15-MAR-2004 (Rel. 43, Last annotation update)
DE  Nucleoside triphosphatase I (EC 3.6.1.15) {Nucleoside triphosphate
DE  phosphohydrolase I} (NPH I) (Fragment).
OS  Swinepox virus (strain Kasza) (SPV).
OC  Viruses; dsDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae;
OC  Suipoxvirus.
OX  NCBI_TaxID=10277;
RN  [1]
RP  SEQUENCE FROM N.A.
RX  MEDLINE=94069924; PubMed=8249275;
RA  Massung R.F., Jayarama V., Moyer R.W.;
RT  "DNA sequence analysis of conserved and unique regions of swinepox
RT  virus: identification of genetic elements supporting phenotypic
RT  observations including a novel G protein-coupled receptor
RT  homologue.";
RL  Virology 197:511-528(1993).
CC  -!- FUNCTION: SERVES TWO ROLES IN TRANSCRIPTION; IT ACTS IN CONCERT
CC  WITH VIRAL TERMINATION FACTOR/CAPPING ENZYME TO CATALYZE RELEASE
CC  OF UUUUUU-CONTAINING NASCENT RNA FROM THE ELONGATION COMPLEX, AND
CC  IT ACTS BY ITSELF AS A POLYMERASE ELONGATION FACTOR TO FACILITATE
CC  READTHROUGH OF INTRINSIC PAUSE SITES (BY SIMILARITY).
CC  -!- CATALYTIC ACTIVITY: NTP + H(2)O = NDP + phosphate.
CC  -!- SIMILARITY: Belongs to the helicase family. NPH I subfamily.
-----
This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
-----
EMBL; L22012; AAA16175.1; -.
DR  InterPro; IPR000330; SNF2_N.
DR  Pfam; PF00176; SNF2_N; 1.
KW  Hydrolase; ATP-binding; Transcription.
FT  DOMAIN 34 89 SNF2_N.
FT  NP_BIND 55 62 ATP (BY SIMILARITY).
FT  NON_TER 89 89
SQ  SEQUENCE 89 AA; 10240 MW; F550027F762EEDE6 CRC64;

Query Match          3.3%; Score 6; DB 1; Length 89;

```


RL Mol. Biol. Evol. 8:515-529(1991).
CC -!- CATALYTIC ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
CC -!- SIMILARITY: Belongs to the complex I subunit 1 family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; M74840; AAA99052.1; -.
DR InterPro; IPR001694; Resp_NADH_dhl.
DR Pfam; PF00146; NADHdh; 1.
DR PROSITE; PS00667; COMPLEX1_ND1_1; PARTIAL.
DR PROSITE; PS00668; COMPLEX1_ND1_2; PARTIAL.
KW Oxidoreductase; NAD; Ubiquinone; Mitochondrion; Transmembrane.
FT NON_TER 125 125
SQ SEQUENCE 125 AA; 13792 MW; 7820CBC029FAAA46 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 125;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLW 22
Db 86 LALLLW 91

RESULT 47
SYGB NEIGO
ID SYGB NEIGO STANDARD; PRT; 126 AA.
AC Q50945;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Glycyl-tRNA synthetase beta chain (EC 6.1.1.14) (Glycine--tRNA ligase
DE beta chain) (GLYS) (Fragment).
GN GLYS.
OS Neisseria gonorrhoeae.
OC Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
OC Neisseriaceae; Neisseria.
OX NCBI_TaxID=485;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 33084 / F62;
RX MEDLINE=95353752; PubMed=7954493;
RA Gotschlich E.C.;
RT "Genetic locus for the biosynthesis of the variable portion of
RT Neisseria gonorrhoeae lipooligosaccharide."
RL J. Exp. Med. 180:2181-2190(1994).
CC -!- CATALYTIC ACTIVITY: ATP + glycine + tRNA(Gly) = AMP + diphosphate
CC + glycyl-tRNA(Gly).
CC -!- SUBUNIT: Tetramer of two alpha and two beta chains (By
CC similarity).
CC -!- SUBCELLULAR LOCATION: Cytoplasmic.
CC -!- SIMILARITY: Belongs to class-II aminoacyl-tRNA synthetase family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U14554; AAA68008.1; -.
DR HAMAP; MF_00255; -; 1.
DR InterPro; IPR006194; tRNA_synt Gly.
DR PROSITE; PS50861; AA_TRNA_LIGASE_II_GLYAB; 1.
KW Aminoacyl-tRNA synthetase; Protein biosynthesis; Ligase; ATP-binding.
FT NON_TER 1 1

SQ SEQUENCE 126 AA; 13343 MW; C3913AD1A6591CF2 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 126;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAAL 12
Db 11 PEAAL 16

RESULT 48
V132 FOWPV
ID V132 FOWPV STANDARD; PRT; 129 AA.
AC P15914;
DT 01-APR-1990 (Rel. 14, Created)
DT 01-APR-1990 (Rel. 14, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Protein FV132.
GN FV132 OR FP6.
OS Fowlpox virus (FPV).
OC Viruses; dsDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae;
OC Avipoxvirus.
OX NCBI_TaxID=10261;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=FP-9 / Isolate HP-444;
RX MEDLINE=88258470; PubMed=2838574;
RA Binns M.M., Tomley F.M., Campbell J., Boursnell M.E.G.;
RT "Comparison of a conserved region in fowlpox virus and vaccinia virus
RT genomes and the translocation of the fowlpox virus thymidine kinase
RT gene."
RL J. Gen. Virol. 69:1275-1283(1988).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Salisbury;
RX MEDLINE=87321104; PubMed=2820129;
RA Drillion R., Spehner D., Villevall D., Lecocq J.P.;
RT "Similar genetic organization between a region of fowlpox virus DNA
RT and the vaccinia virus HindIII J fragment despite divergent location
RT of the thymidine kinase gene."
RL Virology 160:203-209(1987).
RN [3]
RP SEQUENCE FROM N.A.
RC MEDLINE=20193820; PubMed=10729156;
RA Afonso C.L., Tulman E.R., Lu Z., Zsak L., Kutish G.F., Rock D.L.;
RT "The genome of fowlpox virus."
RL J. Virol. 74:3815-3831(2000).
CC -!- SIMILARITY: Belongs to the poxviruses L5 family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; D00320; BAA00229.1; -.
DR EMBL; M17418; AAA66420.1; -.
DR EMBL; AF198100; AAF44476.1; -.
DR PIR; JS0226; WMVZP6.
DR InterPro; IPR006956; Pox_L5.
DR Pfam; PF04872; Pox_L5; 1.
SQ SEQUENCE 129 AA; 14745 MW; DB98CCC282E48A6B CRC64;

Query Match 3.3%; Score 6; DB 1; Length 129;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 72 FFKKEE 77
Db 45 FFKKEE 50

```
RESULT 49
ECCL_HALEL          STANDARD;          PRT;    130 AA.
AC  Q9ZEU6;
DT  30-MAY-2000 (Rel. 39, Created)
DT  30-MAY-2000 (Rel. 39, Last sequence update)
DT  30-MAY-2000 (Rel. 39, Last annotation update)
DE  L-ectoine synthase.
GN  ECTC.
OS  Halomonas elongata.
OC  Bacteria; Proteobacteria; Gammaproteobacteria; Oceanospirillales;
OC  Halomonadaceae; Halomonas.
OX  NCBI_TaxID=2746;
RN  [1]
RP  SEQUENCE FROM N.A.
RC  STRAIN=DSM 3043;
RX  MEDLINE=99123891; PubMed=9924816;
RA  Canovas D., Vargas C., Calderon M.I., Ventosa A., Nieto J.J.;
RT  "Characterization of the genes for the biosynthesis of the compatible
RT  solute ectoine in the moderately halophilic bacterium Halomonas
RT  elongata DSM 3043.";
RL  Syst. Appl. Microbiol. 21:487-497(1998).
CC  -!- FUNCTION: CYCLIC CONDENSATION OF GAMMA-N-ACETYL-ALPHA, GAMMA-
CC  DIAMINOBUTYRIC ACID (ADABA) TO ECTOINE.
CC  -!- PATHWAY: Biosynthesis of ectoine (1,4,5,6-tetrahydro-2-methyl-4-
CC  pyrimidine carboxylic acid); last step.
CC  -----
CC  This SWISS-PROT entry is copyright. It is produced through a collaboration
CC  between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC  the European Bioinformatics Institute. There are no restrictions on its
CC  use by non-profit institutions as long as its content is in no way
CC  modified and this statement is not removed. Usage by and for commercial
CC  entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC  or send an email to license@isb-sib.ch).
CC  -----
DR  EMBL; AJ011103; CAA09485.1; -
DR  InterPro; IPR007113; Cupin sup.
SQ  SEQUENCE 130 AA; 14824 MW; 3E0E0B30B1E761BE CRC64;

Query Match          3.3%; Score 6; DB 1; Length 130;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  146 RKTERF 151
Db  10 RKTERF 15

RESULT 50
FLHE_SALTY
ID  FLHE_SALTY          STANDARD;          PRT;    130 AA.
AC  P40728;
DT  01-FEB-1995 (Rel. 31, Created)
DT  01-FEB-1995 (Rel. 31, Last sequence update)
DT  10-OCT-2003 (Rel. 42, Last annotation update)
DE  Flagellar protein flhE precursor.
GN  FLHE OR STM1912 OR STY2121 OR T0965.
OS  Salmonella typhimurium, and
OS  Salmonella typhi.
OC  Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC  Enterobacteriaceae; Salmonella.
OX  NCBI_TaxID=602, 601;
RN  [1]
RP  SEQUENCE FROM N.A., AND SEQUENCE OF 17-25.
RC  SPECIES=S.typhimurium; STRAIN=KK1004;
RX  MEDLINE=95095932; PubMed=8002587;
RA  Minamino T., Iino T., Kutsukake K.;
RT  "Molecular characterization of the Salmonella typhimurium flhB operon
RT  and its protein products.";
RL  J. Bacteriol. 176:7630-7637(1994).
RN  [2]

SEQUENCE FROM N.A.
SPECIES=S.typhimurium; STRAIN=LT2 / SGSC1412 / ATCC 700720;
MEDLINE=21534948; PubMed=11677609;
McClelland M., Sanderson K.E., Spieth J., Clifton S.W., Latreille P.,
Courtney L., Porwollik S., Ali J., Dante M., Du F., Hou S., Layman D.,
Leonard S., Nguyen C., Scott K., Holmes A., Grewal N., Mulvaney E.,
Ryan E., Sun H., Florea L., Miller W., Stoneking T., Nhan M.,
Waterston R., Wilson R.K.;
"Complete genome sequence of Salmonella enterica serovar Typhimurium
LT2.";
Nature 413:852-856(2001).
[3]
SEQUENCE FROM N.A.
SPECIES=S.typhi; STRAIN=CT18;
MEDLINE=21534947; PubMed=11677608;
Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain J.,
Churcher C., Mungall K.L., Bentley S.D., Holden M.T.G., Sebaihia M.,
Baker S., Basham D., Brooks K., Chillingworth T., Connor P.,
Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J.,
Feltwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagers K.,
Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C.,
Quail M.A., Rutherford K., Simmonds M., Skelton J., Stevens K.,
Whitehead S., Barrell B.G.;
"Complete genome sequence of a multiple drug resistant Salmonella
enterica serovar Typhi CT18.";
Nature 413:848-852(2001).
[4]
SEQUENCE FROM N.A.
SPECIES=S.typhi; STRAIN=Ty2 / ATCC 700931;
MEDLINE=22531367; PubMed=12644504;
Deng W., Liou S.-R., Plunkett G. III, Mayhew G.F., Rose D.J.,
Burland V., Kodyanani V., Schwartz D.C., Blattner F.R.;
"Comparative genomics of Salmonella enterica serovar Typhi strains Ty2
and CT18.";
J. Bacteriol. 185:2330-2337(2003).
-!- FUNCTION: NOT ESSENTIAL FOR FLAGELLAR FORMATION AND FUNCTION.
-----
This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
-----
DR  EMBL; D32203; BAA06904.1; -
DR  EMBL; AF008785; AAL20828.1; -
DR  EMBL; AL627272; CAD05663.1; -
DR  EMBL; AB016837; AAO68638.1; -
DR  PIR; C55546; C55546.
DR  StyGene; SG10528; flhE.
KW  Flagellum; Signal; Complete proteome.
FT  SIGNAL          1 16
FT  CHAIN           17 130  FLAGELLAR PROTEIN FLHE.
SQ  SEQUENCE 130 AA; 14073 MW; 13925A210E0F4C67 CRC64;

Query Match          3.3%; Score 6; DB 1; Length 130;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  16 WLALLL 21
Db  4 WLALLL 9

Search completed: June 14, 2004, 08:07:18
Job time : 18 secs
```

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

CM protein - protein search, using sw model

Run on: June 14, 2004, 08:02:41 ; Search time 41 Seconds
(without alignments)
1400.593 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPQLGPEAAALRPGWLALL.....DLVQDCHQGQRELKFLCMLR 182

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 1017041 seqs, 315518202 residues

Word size : 0
Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Listing first 100 summaries

Database : SPTREMBL 25:
1: sp_archaea:
2: sp_bacteria:
3: sp_fungi:
4: sp_human:
5: sp_invertebrate:
6: sp_mammal:
7: sp_mhc:
8: sp_organelle:
9: sp_phage:
10: sp_plant:
11: sp_rodent:
12: sp_virus:
13: sp_vertebrate:
14: sp_unclassified:
15: sp_rvirus:
16: sp_bacteriap:
17: sp_archaeap:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	182	100.0	182	4 Q9H7Y0	Q9h7y0 homo sapien
2	127	69.8	166	4 Q8WX00	Q8wx00 homo sapien
3	26	14.3	435	11 Q8C3I9	Q8c3i9 mus musculu
4	9	4.9	225	11 Q8C708	Q8c708 mus musculu
5	8	4.4	201	13 Q8QG59	Q8gg59 ambystoma m
6	8	4.4	318	3 Q873R0	Q873r0 nectria hae
7	8	4.4	453	4 Q8N6E7	Q8n6e7 homo sapien
8	8	4.4	489	3 Q8J0Q7	Q8j0q7 nectria hae
9	8	4.4	527	4 Q9P2B7	Q9p2b7 homo sapien
10	8	4.4	543	16 Q8DQX9	Q8dqx9 streptococc
11	8	4.4	543	16 Q8DQX9	Q8dqx9 streptococc
12	8	4.4	550	3 Q7ZA66	Q7za66 ustilago ma
13	7	3.8	27	12 Q9IJF4	Q9ijf4 hepatitis c
14	7	3.8	84	2 Q9KIN1	Q9kin1 pseudomonas
15	7	3.8	84	4 Q9JHE9	Q9jhe9 homo sapien
16	7	3.8	87	16 Q8F4C9	Q8fac9 leptospira

17	7	3.8	102	2 Q9KWW5	Q9kww5 pseudomonas
18	7	3.8	104	16 Q8NLM1	Q8nlm1 corynebacte
19	7	3.8	107	11 Q8BYF7	Q8byf7 mus musculu
20	7	3.8	116	2 Q07305	Q07305 pseudomonas
21	7	3.8	116	2 Q05607	Q05607 pseudomonas
22	7	3.8	116	11 Q8C1L0	Q8c1l0 mus musculu
23	7	3.8	124	9 Q853C8	Q853c8 mycobacteri
24	7	3.8	130	17 Q9YCB5	Q9ycb5 aeropyrum p
25	7	3.8	132	10 Q9C9P6	Q9c9p6 arabidopsis
26	7	3.8	140	16 Q7U9J2	Q7u9j2 synechococc
27	7	3.8	145	11 Q8C383	Q8c383 mus musculu
28	7	3.8	147	16 P74307	P74307 synechocyst
29	7	3.8	149	12 Q910D0	Q910d0 human cytom
30	7	3.8	149	12 Q918E3	Q918e3 human cytom
31	7	3.8	149	12 Q918F4	Q918f4 human cytom
32	7	3.8	149	12 Q918F1	Q918f1 human cytom
33	7	3.8	149	12 Q69186	Q69186 human cytom
34	7	3.8	149	12 Q918E7	Q918e7 human cytom
35	7	3.8	149	12 Q910V7	Q910v7 human cytom
36	7	3.8	160	16 Q9K3I5	Q9k3i5 streptomyce
37	7	3.8	164	11 Q8BTQ8	Q8btq8 mus musculu
38	7	3.8	165	2 Q9KIM9	Q9kim9 pseudomonas
39	7	3.8	166	4 Q96M19	Q96m19 homo sapien
40	7	3.8	170	2 Q32562	Q32562 escherichia
41	7	3.8	171	4 Q00486	Q00486 homo sapien
42	7	3.8	176	11 Q8K3C8	Q8k3c8 mus musculu
43	7	3.8	178	12 Q919M1	Q919m1 culex nigri
44	7	3.8	180	10 Q81265	Q81265 cichorium i
45	7	3.8	180	10 Q8S141	Q8s141 oryza sativ
46	7	3.8	182	4 Q9Y2B0	Q9y2b0 homo sapien
47	7	3.8	182	9 Q9JMN5	Q9jmn5 bacterioph
48	7	3.8	182	11 Q9QXT0	Q9qxt0 mus musculu
49	7	3.8	200	4 Q00485	Q00485 homo sapien
50	7	3.8	204	16 Q98HS8	Q98hs8 rhizobium l
51	7	3.8	208	10 Q9XJ27	Q9xj27 arabidopsis
52	7	3.8	217	10 Q94J84	Q94j84 oryza sativ
53	7	3.8	218	11 Q99KM4	Q99km4 mus musculu
54	7	3.8	218	11 Q9JKX6	Q9jkk6 mus musculu
55	7	3.8	219	4 Q9UH49	Q9uh49 homo sapien
56	7	3.8	221	5 Q8IDN1	Q8idn1 plasmodium
57	7	3.8	222	16 Q9RUP0	Q9rup0 deinococcus
58	7	3.8	226	16 Q98GC3	Q98gc3 rhizobium l
59	7	3.8	227	16 Q7V3V7	Q7v3v7 prochloroco
60	7	3.8	233	16 Q7VZ01	Q7vz01 bordetella
61	7	3.8	244	13 Q803I5	Q803i5 brachydanio
62	7	3.8	248	8 Q8M0D2	Q8m0d2 amoebidium
63	7	3.8	251	16 Q8YIE2	Q8yie2 brucella me
64	7	3.8	251	16 Q7W5U1	Q7wgj2 bordetella
65	7	3.8	251	16 Q7W5U1	Q7wsu1 bordetella
66	7	3.8	254	16 Q7U563	Q7u563 synechococc
67	7	3.8	258	16 Q8ZQB8	Q8zqb8 salmonella
68	7	3.8	258	16 Q8Z7Z8	Q8z7z8 salmonella
69	7	3.8	259	16 Q8FJA7	Q8fja7 escherichia
70	7	3.8	259	16 Q7UD32	Q7ud32 shigella fl
71	7	3.8	272	5 Q9XVE7	Q9xve7 caenorhabdi
72	7	3.8	281	16 Q88ID6	Q88id6 pseudomonas
73	7	3.8	292	10 Q9LX75	Q9lx75 arabidopsis
74	7	3.8	292	16 Q93JU4	Q93jj4 streptomyce
75	7	3.8	297	10 Q7XHJ7	Q7xhj7 hordeum vul
76	7	3.8	304	10 Q8GKX4	Q8gkx4 arabidopsis
77	7	3.8	311	10 Q8VYR2	Q8vyr2 arabidopsis
78	7	3.8	322	8 Q94T54	Q94t54 zu cristatu
79	7	3.8	322	8 Q94T67	Q94t67 trachipteru
80	7	3.8	333	16 Q7WCR7	Q7wcr7 bordetella
81	7	3.8	342	16 Q7W587	Q7w587 bordetella
82	7	3.8	343	16 Q7VZS4	Q7vzs4 bordetella
83	7	3.8	344	16 Q89PZ2	Q89pz2 bradyrhizob
84	7	3.8	352	16 Q8A0Q4	Q8a0q4 bacteroides
85	7	3.8	353	10 Q7XIQ8	Q7xiq8 oryza sativ
86	7	3.8	371	11 Q8CFL0	Q8cflc mus musculu
87	7	3.8	386	2 Q7WYX1	Q7wyx1 bordetella
88	7	3.8	391	16 Q9A5P3	Q9a5p3 caulobacter
89	7	3.8	394	17 Q8TUI9	Q8tui9 methanosarc


```
90 Q8H9W1 pseudomonas
91 Q9VXS3 drosophila
92 Q7XRY4 oryza sativ
93 Q9VXS4 drosophila
94 Q8TX63 methanopyru
95 Q884I9 pseudomonas
96 Q7WQF0 bordetella
97 Q7WCE4 bordetella
98 Q7VRY3 bordetella
99 Q9D682 mus musculu
100 Q8ULM0 pyrococcus
```

ALIGNMENTS

```
RESULT 1
Q9H7Y0 Q9H7Y0 PRELIMINARY; PRT; 182 AA.
AC Q9H7Y0;
DT 01-MAR-2001 (TReMBLrel. 16, Created)
DT 01-MAR-2001 (TReMBLrel. 16, Last sequence update)
DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
DE Hypothetical protein FLJ14103.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Mammary gland;
RA Isogai T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
RA Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H.,
RA Wagatsuma M., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
RA Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.,
RA Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K.,
RA Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y.,
RA Ninomiya K., Iwayanagi T.;
RA "NEDO human cDNA sequencing project.";
RT Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
RL EMBL; AK024165; BAB14843.1; -.
DR Hypothetical protein.
KW SEQUENCE 182 AA; 20643 MW; CA22BB5607329427 CRC64;
```

```
Query Match 100.0%; Score 182; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 3.4e-183;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWPRVPEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWPRVPEIFRLVSKY 120

QY 121 QNEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180
Db 121 QNEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQGQRELKFLCM 180

QY 181 LR 182
Db 181 LR 182
```

```
RESULT 2
Q8WX00 Q8WX00 PRELIMINARY; PRT; 166 AA.
AC Q8WX00;
DT 01-MAR-2002 (TReMBLrel. 20, Created)
DT 01-MAR-2002 (TReMBLrel. 20, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE BA435K1.1 (Novel protein) (Fragment).
```

```
GN BA435K1.1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Lawlor S.;
RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AL591491; CAD13520.1; -.
FT NON TER 166
SQ SEQUENCE 166 AA; 18711 MW; E23F4A20F02E74C1 CRC64;
```

```
Query Match 69.8%; Score 127; DB 4; Length 166;
Best Local Similarity 100.0%; Pred. No. 2.8e-125;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWPRVPEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLLSYPNYSDSKIWPRVPEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127
```

RESULT 3

```
Q8C3I9 Q8C3I9 PRELIMINARY; PRT; 435 AA.
AC Q8C3I9;
DT 01-MAR-2003 (TReMBLrel. 23, Created)
DT 01-MAR-2003 (TReMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
DE Hypothetical P-loop containing nucleotide triphosphate hydrolases
DE structure containing protein.
GN 4930578C19RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Heart;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
DR EMBL; AK085770; BAC39535.1; -.
DR MGD; MGI:1923155; 4930578C19RIK.
KW Hypothetical protein.
SQ SEQUENCE 435 AA; 49042 MW; 0A1B466BB04CEB1D CRC64;
```

```
Query Match 14.3%; Score 26; DB 11; Length 435;
Best Local Similarity 100.0%; Pred. No. 1.7e-18;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 53 TFLGLDKCNACIGTSICKKFFKEEIR 78
Db 55 TFLGLDKCNACIGTSICKKFFKEEIR 80
```

RESULT 4

```
Q8C708 Q8C708 PRELIMINARY; PRT; 225 AA.
AC Q8C708;
DT 01-MAR-2003 (TReMBLrel. 23, Created)
DT 01-MAR-2003 (TReMBLrel. 23, Last sequence update)
```

DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Unclassifiable.
GN A1467606.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10290;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Kidney;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
DR EMBL; AK052739; BAC35126.1; -.
DR MGD; MGI:2141979; A1467606.
SQ SEQUENCE 225 AA; 24532 MW; B8E8387A88983A2B CRC64;

Query Match 4.4%; Score 9; DB 11; Length 225;
Best Local Similarity 100.0%; Pred. No. 0.76;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 SSLSLVPEQ 43
Db 133 SSLSLVPEQ 141

RESULT 5
Q8QG59
ID Q8QG59 PRELIMINARY; PRT; 201 AA.
AC Q8QG59;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Fibroblast growth factor 10.
OS Ambystoma mexicanum (Axolotl).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae;
OC Ambystoma.
OX NCBI_TaxID=8296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21826199; PubMed=11836784;
RA Christensen R.N.; Weinstein M.; Tassava R.A.;
RT "Expression of fibroblast growth factors 4, 8, and 10 in limbs,
RT flanks, and blastemas of Ambystoma."
RL Dev. Dyn. 223:193-203 (2002).
DR EMBL; AY034453; AAK59700.1; -.
DR GO; GO:0038083; F:growth factor activity; IEA.
DR InterPro; IPR008996; Cytok_IL1_like.
DR Pfam; PF00167; FGF; 1.
DR PRINTS; PR00262; IL1HBGF.
DR ProDom; PD000831; IL1 HBGF; 1.
DR SMART; SM00442; FGF; 1.
SQ SEQUENCE 201 AA; 22994 MW; 89EALB61806A6F57 CRC64;

Query Match 4.4%; Score 8; DB 13; Length 201;
Best Local Similarity 100.0%; Pred. No. 7.8;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLWVS 24
Db 19 LALLLWVS 26

RESULT 6
Q873R0
ID Q873R0 PRELIMINARY; PRT; 318 AA.
AC Q873R0;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)

DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Putative membrane protein.
OS Nectria haematococca.
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
OC Hypocreomycetidae; Hypocreales; Nectriaceae; Nectria.
OX NCBI_TaxID=140110;
RN [1]
RP SEQUENCE FROM N.A.
RA Liu X.; VanEtten H.D.;
RT "The right genomic region flanking the PEP gene cluster in the fungal
RT pathogen Nectria haematococca.";
RL Submitted (NOV-2002) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AY179748; AAO72071.1; -.
DR GO; GO:0005215; P:transport activity; IEA.
DR GO; GO:0006810; P:transport; IEA.
DR InterPro; IPR002830; carboxylase.
DR InterPro; IPR000566; Lipocln_cytfabp.
DR Pfam; PF01977; Ubid; 1.
DR TIGRFAMs; TIGR00148; TIGR00148; 1.
DR PROSITE; PS00213; LIPOCALIN; 1.
SQ SEQUENCE 318 AA; 34737 MW; B6392A2A3D3C0D43 CRC64;

Query Match 4.4%; Score 8; DB 3; Length 318;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 86 HLGLPPDS 93
Db 81 HLGLPPDS 88

RESULT 7
Q8N6E7
ID Q8N6E7 PRELIMINARY; PRT; 453 AA.
AC Q8N6E7;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Similar to KIAA1430 protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Strausberg R.;
RL Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
DR EMBL; BC030535; AAH30535.1; -.
SQ SEQUENCE 453 AA; 50537 MW; E99885638D8B91C2 CRC64;

Query Match 4.4%; Score 8; DB 4; Length 453;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 29 SFSLPASS 36
Db 91 SFSLPASS 98

RESULT 8
Q8J0Q7
ID Q8J0Q7 PRELIMINARY; PRT; 489 AA.
AC Q8J0Q7;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein (Fragment).
OS Nectria haematococca.
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
OC Hypocreomycetidae; Hypocreales; Nectriaceae; Nectria.
OX NCBI_TaxID=140110;

RN [1]
RP SEQUENCE FROM N.A.
RA Liu X., VanEtten H.;
RL Submitted (OCT-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AV165032; AAN86012.1; -.
DR GO; GO:0005215; F:transporter activity; IEA.
DR GO; GO:0006310; P:transport; IEA.
DR InterPro; IPR002830; carboxylase.
DR InterPro; IPR000566; Lipocln_cytfabp.
DR Pfam; PF01977; UbiD; 1.
DR TIGRFAMs; TIGR00148; TIGR00148; 1.
DR PROSITE; PS00213; LIPOCALIN; 1.
KW Hypothetical protein.
FT NON_TER 489 489
SQ SEQUENCE 489 AA; 54253 MW; A133A86EF0D872C9 CRC64;

Query Match 4.4%; Score 8; DB 3; Length 489;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 86 HLGPPDS 93
|||||
DB 89 HLGPPDS 96

RESULT 9

Q9P2B7 PRELIMINARY; PRT; 527 AA.

AC Q9P2B7;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2009 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein KIAA1430 (Pragmat).
GN KIAA1430.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=20181126; PubMed=10718198;
RA Nagase T., Kikuno R., Ishikawa K., Hirotsawa M., Ohara O.;
RT "Prediction of the coding sequences of unidentified human genes.XVI.
RT The complete sequences of 150 new cDNA clones from brain which code
RT for large proteins in vitro."
RL DNA Res. 7:65-73 (2000).
DR EMBL; AB037851; BAA92668.1; -.
KW Hypothetical protein.
FT NON_TER 1
SQ SEQUENCE 527 AA; 58896 MW; 082CF438BB9F4F0A CRC64;

Query Match 4.4%; Score 8; DB 4; Length 527;
Best Local Similarity 100.0%; Pred. No. 18;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 29 SPSLPASS 36
|||||
DB 86 SPSLPASS 93

RESULT 10

Q97S92 PRELIMINARY; PRT; 543 AA.

AC Q97S92;
DT 01-OCT-2001 (TrEMBLrel. 18, Created)
DT 01-OCT-2001 (TrEMBLrel. 18, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Na/Pi cotransporter II-related protein.
GN SP0496.
OS Streptococcus pneumoniae.
OC Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
OC Streptococcus.

OX NCBI_TaxID=1313;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC BAA-334 / TIGR4;
RX MEDLINE=21357209; PubMed=11463916;
RA Tettelin H., Nelson K.E., Paulsen I.T., Eisen J.A., Read T.D.,
RA Peterson S., Heidelberg J., DeBoy R.T., Haft D.H., Dodson R.J.,
RA Durkin A.S., Gwinn M., Kolonay J.F., Nelson W.C., Peterson J.D.,
RA Umayam L.A., White O., Salzberg S.L., Lewis M.R., Radune D.,
RA Holtzapple E., Khouri H., Wolf A.M., Utterback T.R., Hansen C.L.,
RA McDonald L.A., Feldblyum T.V., Angiuoli S., Dickinson T., Hickey E.K.,
RA Holt I.E., Loftus B.J., Yang F., Smith H.O., Venter J.C., C.M.;
RA Dougherty B.A., Morrison D.A., Hollingshead S.K., Fraser C.M.;
RT "Complete genome sequence of a virulent isolate of Streptococcus
RT pneumoniae."
RL Science 293:498-506 (2001).
DR EMBL; AE007361; AAK74654.1; -.
DR PIR; E95057; E95057.
DR TIGR; SP0496; -.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015321; F:sodium-dependent phosphate transporter acti. -; IEA.
DR GO; GO:0006817; P:phosphate transport; IEA.
DR InterPro; IPR003841; Na/Pi_cotranspt.
DR InterPro; IPR004633; NaPi_cotransptII.
DR Pfam; PF02690; Na_Pi_cotrans; 2.
DR TIGRFAMs; TIGR00704; NaPi_cotrn_rel; 1.
KW Complete proteome.
SQ SEQUENCE 543 AA; 59575 MW; C79ED04CCAFC0EB5 CRC64;

Query Match 4.4%; Score 8; DB 16; Length 543;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 141 IERVLRKT 148
|||||
DB 492 IERVLRKT 499

RESULT 11

Q8DQX9 PRELIMINARY; PRT; 543 AA.

AC Q8DQX9;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Conserved hypothetical protein.
GN SPR0439.
OS Streptococcus pneumoniae (strain ATCC BAA-255 / R6).
OC Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
OC Streptococcus.
OX NCBI_TaxID=171131;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21429245; PubMed=11544234;
RA Hoskins J., Alborn W.E. Jr., Arnold J., Blaszcak L.C., Burgett S.,
RA DeHoff B.S., Estrem S.T., Fritz L., Fu D.-J., Fuller W., Geringer C.,
RA Gilmore R., Glass J.S., Khoja H., Kraft A.R., Lagace R.E.,
RA LeBlanc D.J., Lee L.N., Lefkowitz E.J., Lu J., Matsushima P.,
RA McAhren S.M., McHenney M., McLeaster K., Mundy C.W., Nicas T.I.,
RA Norris F.H., O'Gara M., Peery R.B., Robertson G.T., Rocky P.,
RA Sun P.-M., Winkler M.E., Yang Y., Young-Bellido M., Zhao G.,
RA Zook C.A., Baltz R.H., Jaskunas S.R., Rostek P.R. Jr., Skatrud P.L.,
RA Glass J.I.;
RT "Genome of the bacterium Streptococcus pneumoniae strain R6."
RL J. Bacteriol. 183:5709-5717 (2001).
DR EMBL; AE008424; AAK99243.1; -.
DR PIR; G97926; G97926.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015321; F:sodium-dependent phosphate transporter acti. -; IEA.
DR GO; GO:0006817; P:phosphate transport; IEA.
DR InterPro; IPR003841; Na/Pi_cotranspt.
DR InterPro; IPR004633; NaPi_cotransptII.
DR Pfam; PF02690; Na_Pi_cotrans; 2.

DR TIGRFAMS; TIGR00704; NapI_cotrn_rel; 1.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 543 AA; 59637 MW; 6996ED3D83FA3B7A CRC64;

Query Match 4.4%; Score 8; DB 16; Length 543;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 141 IERVLRKT 148
Db 492 IERVLRKT 499
|||||

RESULT 12
Q7ZA66 PRELIMINARY; PRT; 550 AA.
AC Q7ZA66;
DT 01-OCT-2003 (TrEMBLrel. 25, Created)
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Related to protein disulfide isomerase.
GN PIG2.
OS Ustilago maydis (Smut fungus).
OC Eukaryota; Fungi; Basidiomycota; Ustilaginomycetes;
OC Ustilaginomycetidae; Ustilaginales; Ustilaginaceae; Ustilago.
OX NCBI_TaxID=5270;
RN [1]
RP SEQUENCE FROM N.A.
RA Aichinger C., Hansson K., Eichhorn H., Lessing F., Mannhaupt G.,
RA Mewes W., Kahmann R.;
RT "Identification of plant regulated genes in Ustilago maydis by
RT enhancer trapping mutagenesis."
RL Mol. Genet. Genomics 0:0-0(2003).
DR EMBL; BX511040; CAD91461.1; --
KW Isomerase.
SQ SEQUENCE 550 AA; 59141 MW; AF24A75F38A5F130 CRC64;

Query Match 4.4%; Score 8; DB 3; Length 550;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSSL 40
Db 219 PASSLSSL 226
|||||

RESULT 13
Q9IJF4 PRELIMINARY; PRT; 27 AA.
AC Q9IJF4;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Envelope protein (Genome polyprotein) (Fragment).
OS Hepatitis C virus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
OC Hepacivirus.
OX NCBI_TaxID=11103;
RN [1]
RP SEQUENCE FROM N.A.
RA Alberto S.-F.;
RT "Influence of the dynamics of Hepatitis C virus quasispecies in the
RT histological outcome of liver transplantation."
RL Submitted (JAN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF221141; AAF77703.1; --
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0019028; C:viral capsid; IEA.
DR GO; GO:0019031; C:viral envelope; IEA.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR InterPro; IPR002531; HCV NS1.
DR Pfam; PF01560; HCV NS1; 1.
KW Coat protein; Envelope protein; Glycoprotein; Nonstructural protein;
KW Polyprotein; Transmembrane.

FT NON_TER 1 1
FT NON_TER 27 27
SQ SEQUENCE 27 AA; 2716 MW; C8F6555E3CF5925A CRC64;

Query Match 3.8%; Score 7; DB 12; Length 27;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSSL 40
Db 12 ASSLSSL 18
|||||

RESULT 14
Q9KIN1 PRELIMINARY; PRT; 84 AA.
AC Q9KIN1;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE ECF sigma factor PrtI (Fragment).
GN PRTI.
OS Pseudomonas fluorescens.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=294;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LS107d2;
RX MEDLINE=20553178; PubMed=11101673;
RA Burger M., Woods R.G., McCarthy C., Beacham I.R.;
RT "Temperature regulation of protease in Pseudomonas fluorescens LS107d2
RT by an ECF sigma factor and a transmembrane activator."
RL Microbiology 146:3149-3155(2000).
DR EMBL; AF228766; AAF81072.1; --
DR GO; GO:0005622; C:intracellular; IEA.
DR GO; GO:0003700; F:transcription factor activity; IEA.
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR InterPro; IPR000792; HTH LuxR.
DR InterPro; IPR009043; RNA_pol_sigma.
DR InterPro; IPR007630; Sigma70_r4.
DR Pfam; PF04545; sigma70_r4; 1.
FT NON_TER 1 1
SQ SEQUENCE 84 AA; 9210 MW; 9BC226F1F435387E CRC64;

Query Match 3.8%; Score 7; DB 2; Length 84;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 18 ALLLWVS 24
Db 30 ALLLWVS 36
|||||

RESULT 15
Q9UHE9 PRELIMINARY; PRT; 84 AA.
AC Q9UHE9;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE ZSIG9 protein (Transmembrane protein 4).
GN ZSIG9.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Sheppard P., Jelinek L., Whitmore T., Blumberg H., Lehner J.,
RA O'Hara P.;
RT "Homo sapiens putative secreted protein."
RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.

```
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Eye;
RA Strausberg R.;
RL Submitted (NOV-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF186113; AAF01431.1; -.
DR EMBL; BC001027; AAH01027.1; -.
SQ SEQUENCE 84 AA; 9116 MW; DCA2B08EC77EF1F0 CRC64;

Query Match 3.8%; Score 7; DB 4; Length 84;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 16
Q8F4C9
ID Q8F4C9 PRELIMINARY; PRT; 87 AA.
AC Q8F4C9;
DT C1-MAR-2003 (TrEMBLrel. 23, Created)
DT C1-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT C1-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE BOLA protein.
GN LA2112.
OS Leptospira interrogans.
OC Bacteria; Spirochaetes; Spirochaetales; Leptospiraceae; Leptospira.
OX NCBI_TaxID=173;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=56601 / Serogroup Icterohaemorrhagiae / Serovar lai;
RA Ren S.;
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AE011383; AAN49311.1; -.
DR GO; GO:0030528; F:transcription regulator activity; IEA.
DR InterPro; IPR002634; BOLA.
DR Pfam; PF01722; BOLA; 1.
KW Complete proteome.
SQ SEQUENCE 87 AA; 9878 MW; D15B66B784A7FA23 CRC64;

Query Match 3.8%; Score 7; DB 16; Length 87;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 73 FKEEIRS 79
DB 3 FKEEIRS 9

RESULT 17
Q9KWW5
ID Q9KWW5 PRELIMINARY; PRT; 102 AA.
AC Q9KWW5;
DT C1-OCT-2000 (TrEMBLrel. 15, Created)
DT C1-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT C1-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Mercuric ion transport protein (Fragment).
GN MERT OR MERT2X1.
OS Pseudomonas putida.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=303;
RN [1]
RP SEQUENCE FROM N.A.
RA Kholodii G.Y., Mindlin S.Z., Gorlenko Z.M., Bass I.A., Kalyaeva E.S.,
RA Nikiforov V.;
RT "Host-dependent transposition of Tn5041."
RL Russ. J. Genet. 36:365-373(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=MU10-2;
```

```
RX MEDLINE=22315381; PubMed=12427948;
RA Kholodii G., Gorlenko Z., Mindlin S., Hobman J., Nikiforov V.;
RT "Tn5041-like transposons: molecular diversity, evolutionary
relationships and distribution of distinct variants in environmental
bacteria.";
RL Microbiology 148:3569-3582(2002).
DR EMBL; Y18976; CAB81571.1; -.
DR EMBL; AJ318529; CAC86913.1; -.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015097; F:mercury ion transporter activity; IEA.
DR GO; GO:0015694; P:mercury ion transport; IEA.
DR InterPro; IPR003457; Transprt_MerT.
DR Pfam; PF02411; MerT; 1.
FT NON_TER 102 102
SQ SEQUENCE 102 AA; 10829 MW; C564F84950745332 CRC64;

Query Match 3.8%; Score 7; DB 2; Length 102;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 PQVRTSY 48
DB 85 PQVRTSY 91

RESULT 18
Q8NLM1
ID Q8NLM1 PRELIMINARY; PRT; 104 AA.
AC Q8NLM1;
DT C1-OCT-2002 (TrEMBLrel. 22, Created)
DT C1-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT C1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Predicted transcriptional regulators.
GN CGL2920.
OS Corynebacterium glutamicum (Brevibacterium flavum).
OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Corynebacteriaceae; Corynebacterium.
OX NCBI_TaxID=1718;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 13032 / DSM 20300 / NCIB 10025;
RA Nakagawa S.;
RT "Complete genomic sequence of Corynebacterium glutamicum ATCC 13032."
RL Submitted (MAY-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AP005283; BAC00314.1; -.
DR GO; GO:0003677; F:DNA binding; IEA.
DR InterPro; IPR001387; HTH_3.
DR Pfam; PF01381; HTH_3; 1.
KW Complete proteome.
SQ SEQUENCE 104 AA; 11276 MW; 42B9F4BCEFC9D9791 CRC64;
```

```
Query Match 3.8%; Score 7; DB 16; Length 104;
Best Local Similarity 100.0%; Pred. No. 49;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 83 LASHLGL 89
DB 89 LASHLGL 95

RESULT 19
Q8BYF7
ID Q8BYF7 PRELIMINARY; PRT; 107 AA.
AC Q8BYF7;
DT C1-MAR-2003 (TrEMBLrel. 23, Created)
DT C1-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT C1-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hypothetical death domain containing protein.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
OX NCBI_TaxID=10090;
RN [1]
```

RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Thymus;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
DR EMBL; AK039924; BAC30479.1; -.
DR PIR; PT0558; PT0677.
KW Hypothetical protein.
SQ SEQUENCE 107 AA; 11995 MW; 2A54AFEE3827F768 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 107;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 83 LASHLGL 89
|||||
DB 91 LASHLGL 97

RESULT 20
Q07305 PRELIMINARY; PRT; 116 AA.
AC 007305;
DT 01-JUL-1997 (TREMBLrel. 04, Created)
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE MERT protein.
GN MERT.
OS Pseudomonas sp., and
OS Pseudomonas paucimobilis (Sphingomonas paucimobilis).
OC Bacteria; Proteobacteria.
OX NCBI_TaxID=306, 13689;
RN [1]
RP SEQUENCE FROM N.A.
RC SPECIES=Pseudomonas sp.; STRAIN=TC97;
RX MEDLINE=97303088; PubMed=9159519;
RA Yurieva O., Kholodii G., Minakhin L., Gorlenko Z., Kalyaeva E.,
RA Mindlin S., Nikiforov V.;
RT "Intercontinental spread of promiscuous mercury-resistance transposons
RT in environmental bacteria.";
RL Mol. Microbiol. 24:321-329(1997).
RN [2]
RP SEQUENCE FROM N.A.
RC SPECIES=P. paucimobilis; STRAIN=661H, and 660H;
RX MEDLINE=97208220; PubMed=9055422;
RA Liebert C.A., Wireman J., Smith T., Summers A.O.;
RT "Phylogeny of mercury resistance (mer) operons of gram-negative
RT bacteria isolated from the fecal flora of primates.";
RL Appl. Environ. Microbiol. 63:1066-1076(1997).
RN [3]
RP SEQUENCE FROM N.A.
RC SPECIES=P. paucimobilis; STRAIN=661H, and 660H;
RX MEDLINE=98027386; PubMed=9361435;
RA Wireman J., Liebert C.A., Smith T., Summers A.O.;
RT "Association of mercury resistance with antibiotic resistance in the
RT gram-negative fecal bacteria of primates.";
RL Appl. Environ. Microbiol. 63:4494-4503(1997).
RN [4]
RP SEQUENCE FROM N.A.
RC SPECIES=P. paucimobilis; STRAIN=661H, and 660H;
RX MEDLINE=98027386; PubMed=9361435;
RA Wireman J., Liebert C.A., Smith T., Summers A.O.;
RT "The quality of merC: A hotspot of genetic diversity in mercury
RT resistance loci.";
RL Submitted (JAN-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; Y09210; CAA70410.1; -.
DR EMBL; AF120973; AAD23811.1; -.
DR EMBL; AF120972; AAD23806.2; -.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015097; F:mercury ion transporter activity; IEA.
DR GO; GO:0015694; P:mercury ion transport; IEA.

DR InterPro; IPR003457; Transprt_MerT.
DR Pfam; PF02411; MerT; 1.
SQ SEQUENCE 116 AA; 12437 MW; 5C926A63C211FE6B CRC64;

Query Match 3.8%; Score 7; DB 2; Length 116;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 PQVRTSY 48
|||||
DB 85 PQVRTSY 91

RESULT 21
O05607 PRELIMINARY; PRT; 116 AA.
AC 005607;
DT 01-JUL-1997 (TREMBLrel. 04, Created)
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Mercuric ion transport protein.
GN MERT.
OS Pseudomonas sp.
OC Bacteria; Proteobacteria.
OX NCBI_TaxID=306;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=KHP41; TRANSPONSON=Tn5041;
RX MEDLINE=97419493; PubMed=9274008;
RA Kholodii G.Y., Yurieva O.V., Gorlenko Z.M., Mindlin S.Z., Bass I.A.,
RA Lomovskaya O.L., Kopteva A.V., Nikiforov V.G.;
RT "Tn5041: a chimeric mercury resistance transposon closely related to
RT the toluene degradative transposon Tn4651.";
RL Microbiology 143:2549-2556(1997).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=KHP41; TRANSPONSON=Tn5041;
RA Kholodii G.Y., Mindlin S.Z., Gorlenko Z.M., Bass I.A., Kalyaeva E.S.,
RA Nikiforov V.;
RT "Host-dependent transposition of Tn5041.";
RL Russ. J. Genet. 36:365-373(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=KHP41; TRANSPONSON=Tn5041;
RA Kholodii G.;
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; X98999; CAA67448.1; -.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015097; F:mercury ion transporter activity; IEA.
DR GO; GO:0015694; P:mercury ion transport; IEA.
DR InterPro; IPR003457; Transprt_MerT.
DR Pfam; PF02411; MerT; 1.
SQ SEQUENCE 116 AA; 12372 MW; 833080A916173371 CRC64;

Query Match 3.8%; Score 7; DB 2; Length 116;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 PQVRTSY 48
|||||
DB 85 PQVRTSY 91

RESULT 22
Q8C1L0 PRELIMINARY; PRT; 116 AA.
AC 08C1L0;
DT 01-MAR-2003 (TREMBLrel. 23, Created)
DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Hypothetical death domain containing protein {Fragment}.
GN 2510009H09RIK.
OS Mus musculus (Mouse).


```
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Liver;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; AKG10945; BAC25320.1; -.
DR MGD; MGI:1923839; 251009H09Rik.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro; IPR000488; Death.
DR Pfam; PF00531; death; 1.
DR SMART; SM00005; DEATH; 1.
DR PROSITE; PS50017; DEATH_DOMAIN; 1.
KW Hypothetical protein.
FT NON_TER 1
SQ SEQUENCE 116 AA; 13219 MW; ECE5B49726C687CA CRC64;

Query Match 3.8%; Score 7; DB 11; Length 116;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 83 LASHLGL 89
DB 31 LASHLGL 37

RESULT 23
Q853C8 PRELIMINARY; PRT; 124 AA.
AC Q853C8;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Gp154.
GN 154.
OS Mycobacteriophage Bx1.
OC Viruses; dsDNA viruses, no RNA stage; Caudovirales; Myoviridae.
OX NCBI_TaxID=205877;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22592660; PubMed=12705866;
RA Pedulla M.L., Ford M.E., Houtz J.M., Karthikeyan T., Wadsworth C.,
RA Lewis J.A., Jacobs-Sera D., Falbo J., Gross J., Pannunzio N.R.,
RA Brucker W., Kumar V., Kandasamy J., Keenan L., Bardarov S.,
RA Kriakov J., Lawrence J.G., Jacobs W.R. Jr., Hendrix R.W.,
RA Hatfull G.F.;
RT "Origins of highly mosaic mycobacteriophage genomes.";
RL Cell 113:171-182(2003).
DR EMBL; AY129337; AANI6809.1; -.
SQ SEQUENCE 124 AA; 13428 MW; E405AF0C3474989B CRC64;

Query Match 3.8%; Score 7; DB 9; Length 124;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GPEAAAL 12
DB 98 GPEAAAL 104

RESULT 24
Q9YCB5 PRELIMINARY; PRT; 130 AA.
AC Q9YCB5;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update);
```

```
DE Hypothetical protein APE1341.
GN APE1341.
OS Aeropyrum pernix.
OC Archaea; Crenarchaeota; Thermoprotei; Desulfurococcales;
OC Desulfurococaceae; Aeropyrum.
OX NCBI_TaxID=56636;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=K1;
RX MEDLINE=99310339; PubMed=10382966;
RA Kawarabayasi Y., Hino Y., Horikawa H., Yamazaki S., Haikawa Y.,
RA Jin-no K., Takahashi M., Sekine M., Baba S.-I., Arkai A., Kcsugi H.,
RA Hosoyama A., Fukui S., Nagai Y., Nishijima K., Nakazawa H.,
RA Takamiya M., Masuda S., Funahashi T., Tanaka T., Kudoh Y.,
RA Yamazaki J., Kushida N., Oguchi A., Aoki K.-I., Kubota K.,
RA Nakamura Y., Nomura N., Sako Y., Kikuchi H.;
RT "Complete genome sequence of an aerobic hyper-thermophilic
RT crenarchaeon, Aeropyrum pernix K1.";
RL DNA Res. 6:83-101(1999).
DR EMBL; AP000061; BAA80333.1; -.
DR PIR; G72609; G72609.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 130 AA; 13783 MW; 900DB1732C30C2A5 CRC64;

Query Match 3.8%; Score 7; DB 17; Length 130;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
DB 50 ASSLSL 56

RESULT 25
Q9C9P6 PRELIMINARY; PRT; 132 AA.
AC Q9C9P6;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Putative ribosomal protein S9.
GN F9E10.17.
OS Arabidopsis thaliana (Mouse-ear cress).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eurosids II; Brassicales; Brassicaceae; Arabidopsis.
OX NCBI_TaxID=3702;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. Columbia;
RX MEDLINE=21016719; PubMed=11130712;
RA Theologis A., Ecker J.R., Palm C.J., Federspiel N.A., Kaul S.,
RA White O., Alonso J., Altafi H., Araujo R., Bowman C.L., Brooks S.Y.,
RA Buehler E., Chan A., Chao Q., Chen H., Cheuk R.F., Chin C.W.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Dunn P., Etgu P., Feldblyum T.V., Feng J.-D., Fong B., Fujii C.Y.,
RA Gill J.E., Goldsmith A.D., Haas B., Hansen N.F., Hughes B., Huizar L.,
RA Hunter J.L., Jenkins J., Johnson-Hopson C., Khan S., Khaykin E.,
RA Kim C.J., Koo H.L., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
RA Langin-Hooper S., Lee A., Lee J.M., Lenz C.A., Li J.H., Li Y.-P.,
RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marziali A.,
RA Militischer J., Miranda M., Nguyen M., Nierman W.C., Osborne B.I.,
RA Pai G., Peterson J., Pham P.K., Rizzo M., Rooney T., Rowley D.,
RA Sakano H., Salzberg S.L., Schwartz J.R., Shinn P., Southwick A.M.,
RA Sun H., Tallon L.J., Tambunga G., Toriumi M.J., Town C.D.,
RA Utterback T., Van Aken S., Vaysberg M., Vysotskaia V.S., Walker M.,
RA Wu D., Yu G., Fraser C.M., Venter J.C., Davis R.W.;
RT "Sequence and analysis of chromosome 1 of the plant Arabidopsis
RT thaliana.";
RL Nature 408:816-820(2000).
DR EMBL; AC013258; AAG51912.1; -.
DR PIR; F96779; F96779.
DR GO; GO:0005622; C:intracellular; IEA.
```

DR GO; GO:0005840; C:ribosome; IEA.
DR GO; GO:0003735; F:structural constituent of ribosome; IEA.
DR GO; GO:0006412; P:protein biosynthesis; IEA.
DR InterPro; IPR000754; Ribosomal_S9.
DR Pfam; PF00380; Ribosomal_S9; 1.
DR ProDom; PD001627; Ribosomal_S9; 1.
KW Ribosomal protein.
SQ SEQUENCE 132 AA; 14283 MW; E970C02586F53BFC CRC64;

Query Match 3.8%; Score 7; DB 10; Length 132;
Best Local Similarity 100.0%; Pred.No. 60;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
DB 8 ASSLSL 14

RESULT 25
Q7U9J2 PRELIMINARY; PRT; 140 AA.
AC Q7U9J2;
DT 01-OCT-2003 (TrEMBLrel. 25, Created)
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein precursor.
GN SYNW0264.
OS Synechococcus sp. (strain WH8102).
OC Bacteria; Cyanobacteria; Chroococcales; Synechococcus.
OX NCBI_TaxID=84588;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22825697; PubMed=12917641;
RA Palenik B., Brahamsha B., Larimer F.W., Land M., Hauser L., Chain P.,
RA Lamerdin J., Regala W., Allen E.E., McCarran J., Paulsen I.,
RA Dufresne A., Partensky F., Webb E.A., Waterbury J.;
RT "The genome of a motile marine Synechococcus";
RL Nature 424:1037-1042(2003).
DR EMBL; BX569689; CAE06779.1; -.
KW Hypothetical protein; Signal; Complete proteome.
FT SIGNAL 1 18 Potential.
SQ SEQUENCE 140 AA; 14890 MW; 8F862FCD253784FA CRC64;

Query Match 3.8%; Score 7; DB 16; Length 140;
Best Local Similarity 100.0%; Pred.No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALL 21
DB 5 GWLALL 11

RESULT 27
Q8C383 PRELIMINARY; PRT; 145 AA.
AC Q8C383;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hypothetical protein (Fragment).
GN COX7B.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";

RL Nature 420:563-573(2002).
DR EMBL; AK086654; BAC39711.1; -.
DR PIR; PT0645; PT0645.
DR MGD; MGI:1913392; Cox7b.
KW Hypothetical protein.
FT NON TER 1
SQ SEQUENCE 145 AA; 15419 MW; 423045899247D3C7 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 145;
Best Local Similarity 100.0%; Pred.No. 65;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
DB 33 ASSLSL 39

RESULT 28
P74307 PRELIMINARY; PRT; 147 AA.
AC P74307;
DT 01-FEB-1997 (TrEMBLrel. 02, Created)
DT 01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein slr0941.
GN SLR0941.
OS Synechocystis sp. (strain PCC 6803).
OC Bacteria; Cyanobacteria; Chroococcales; Synechocystis.
OX NCBI_TaxID=1148;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97061201; PubMed=8905231;
RA Kaneko T., Sato S., Kotani H., Tanaka A., Asamizu E., Nakamura Y.,
RA Miyajima N., Hirose M., Sugiura M., Sasamoto S., Kimura T.,
RA Hosouchi T., Matsuno A., Muraki A., Nakazaki N., Naruo K., Okumura S.,
RA Shimpou S., Takeuchi C., Wada T., Watanabe A., Yamada M., Yasuda M.,
RA Tabata S.;
RT "Sequence analysis of the genome of the unicellular cyanobacterium
Synechocystis sp. strain PCC6803. II. Sequence determination of the
entire genome and assignment of potential protein-coding regions.";
RL DNA Res. 3:109-136(1996).
DR EMBL; D90914; BAA18401.1; -.
DR PIR; S76142; S76142.
DR InterPro; IPR007821; DUF704.
DR Pfam; PF05146; DUF704; 1.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 147 AA; 17215 MW; 89D714027B61C801 CRC64;

Query Match 3.8%; Score 7; DB 16; Length 147;
Best Local Similarity 100.0%; Pred.No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 PGWLALL 20
DB 110 PGWLALL 116

RESULT 29
Q91CD0 PRELIMINARY; PRT; 149 AA.
AC Q91CD0;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE US3iii protein.
GN US3.
OS Human cytomegalovirus.
OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
OC Betaherpesvirinae; Cytomegalovirus.
OX NCBI_TaxID=10359;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=29A, and 27A;

Matches

7;

Conservative

0;

Mismatches

0;

Indels

0;

Gaps

0;

RESULT 37

Q8BTQ8

ID

Q8BTQ8

PRELIMINARY;

PRT;

164 AA.

AC

Q8BTQ8;

DT

01-MAR-2003

(TREMBLrel. 23, Created)

DT

01-MAR-2003

(TREMBLrel. 23, Last sequence update)

DT

01-JUN-2003

(TREMBLrel. 24, Last annotation update)

DE

Hypothetical death domain containing protein.

GN

2510009H09RIK.

OS

Mus musculus (Mouse).

OC

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

OX

NCBI_TaxID=10090;

RN

[1]

RP

SEQUENCE FROM N.A.

RC

STRAIN=NOD; TISSUE=Thymus;

RX

MEDLINE=22354683; PubMed=12466851;

RA

The FANTOM Consortium,

RA

the RIKEN Genome Exploration Research Group Phase I & II Team;

RT

"Analysis of the mouse transcriptome based on functional annotation of

RT

60,770 full-length cDNAs."

RL

Nature 420:563-573(2002).

DR

EMBL; AK089034; BAC40711.1; --

DR

PIR; P05558; P06377.

DR

MGI; 1923839; 2510009H09RIK.

DR

GO; GO:0007165; P:signal transduction; IEA.

DR

InterPro; IPR000498; Death.

DR

Pfam; PF00531; death; 1.

DR

SMART; SM00005; DEATH; 1.

DR

PROSITE; PS00017; DEATH_DOMAIN; 1.

KW

Hypothetical protein.

SQ

SEQUENCE 164 AA; 18409 MW; 815E0DD1DDBA3582 CRC64;

Query Match

3.8%;

Score 7;

DB 11;

Length 164;

Best Local Similarity

100.0%;

Pred. No. 73;

Matches

7;

Conservative

0;

Mismatches

0;

Indels

0;

Gaps

0;

QY

83

LASHLGL 89

|||||

Db

79

LASHLGL 85

RESULT 38

Q9KIM9

ID

Q9KIM9

PRELIMINARY;

PRT;

165 AA.

AC

Q9KIM9;

DT

01-OCT-2000

(TREMBLrel. 15, Created)

DT

01-OCT-2000

(TREMBLrel. 15, Last sequence update)

DT

01-OCT-2003

(TREMBLrel. 25, Last annotation update)

DE

ECF sigma factor PrtI (RNA polymerase sigma factor).

GN

PRTI.

OS

Pseudomonas fluorescens.

OC

Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;

OC

Pseudomonadaceae; Pseudomonas.

OX

NCBI_TaxID=294;

RN

[1]

RP

SEQUENCE FROM N.A.

RC

STRAIN=B52;

RX

MEDLINE=20553178; PubMed=11101673;

RA

Burger M., Woods R.G., McCarthy C., Beacham I.R.;

RT

"Temperature regulation of protease in Pseudomonas fluorescens LS107d2

RT

by an ECF sigma factor and a transmembrane activator."

RL

Microbiology 146:3149-3155(2000).

DR

EMBL; AF228767; AAF81074.1; --

DR

InterPro; IPR009043; RNA_pol_sigma.

DR

InterPro; IPR007627; Sigma70_r2.

DR

Pfam; PF04542; sigma70_r2; 1.

SQ

SEQUENCE 165 AA; 19168 MW; 8BCAF4E984051FCF CRC64;

Query Match

3.8%;

Score 7;

DB 2;

Length 165;

Best Local Similarity

100.0%;

Pred. No. 74;

Matches

7;

Conservative

0;

Mismatches

0;

Indels

0;

Gaps

0;

QY

18

ALLLWVS 24

|||||

Db

114

ALLLWVS 120

Query Match

3.8%;

Score 7;

DB 4;

Length 166;

Best Local Similarity

100.0%;

Pred. No. 74;

Matches

7;

Conservative

0;

Mismatches

0;

Indels

0;

Gaps

0;

QY

130

CASASAP 136

|||||

Db

119

CASASAP 125

RESULT 40

O32562

ID

O32562

PRELIMINARY;

PRT;

170 AA.

AC

O32562;

DT

01-JAN-1998

(TREMBLrel. 05, Created)

DT

01-JAN-1998

(TREMBLrel. 05, Last sequence update)

DT

01-OCT-2003

(TREMBLrel. 25, Last annotation update)

DE

Hypothetical protein (Fragment).

OS

Escherichia coli.

OC

Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;

OC

Enterobacteriaceae; Escherichia.

OX

NCBI_TaxID=562;

RN

[1]

RP

SEQUENCE FROM N.A.

RC

STRAIN=K-12;

RX

MEDLINE=91114703; PubMed=1989883;

RA

Niki H., Jaffe A., Imamura R., Ogura T., Hiraga S.;

RT

"The new gene mukB codes for a 177 kDa protein with coiled-coil

RT

domains involved in chromosome partitioning of E.coli."

RL

EMBO J. 10:183-193(1991).

RN

[2]

RP

SEQUENCE FROM N.A.

RC

STRAIN=K-12;

RX

MEDLINE=94232180; PubMed=7513784;

RA

Feng J., Yamanaka K., Niki H., Ogura T., Hiraga S.;

RT

"New killing system controlled by two genes located immediately

RT

upstream of the mukB gene in Escherichia coli."

RL

Mol. Gen. Genet. 243:136-147(1994).

RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=K-12;
RX MEDLINE=96079493; PubMed=8566713;
RA Yamanaka K., Niki H., Ogura T., Hiraga S.;
RT "Characterization of the smtA gene encoding an S-adenosylmethionine-
dependent methyltransferase of Escherichia coli.";
RL FEMS Microbiol. Lett. 133:59-63(1995).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=K-12;
RX MEDLINE=96180640; PubMed=8602138;
RA Yamanaka K., Niki H., Ogura T., Hiraga S.;
RT "Identification of two new genes, mukE and mukF, involved in
chromosome partitioning in Escherichia coli.";
RL Mol. Gen. Genet. 250:241-251(1996).
DR EMBL; D26440; BAA21122.1; -.
DR InterPro; IPR003848; DUF218.
DR Pfam; PF02698; DUF218; 1.
KW Hypothetical protein.
FT NON TER 170 170
SQ SEQUENCE 170 AA; 18835 MW; 2F118B16A2F371DC CRC64;

Query Match 3.8%; Score 7; DB 2; Length 170;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWALLL 21
Db |||||
46 GWALLL 52

RESULT 41
O00486
ID O00486 PRELIMINARY; PRT; 171 AA.
AC O00486;
DT 01-JUL-1997 (TrEMBLrel. 04, Created)
DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Putative collagen homolog protein-b.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97459673; PubMed=9315633;
RA Zhang L., Pagano J.S.;
RT "IRF-7, a new interferon regulatory factor associated with Epstein-
Barr virus latency.";
RL Mol. Cell. Biol. 17:5748-5757(1997).
DR EMBL; U53831; AB80689.1; -.
DR GO; GO:0016564; F:transcriptional repressor activity; TAS.
DR GO; GO:0016481; P:negative regulation of transcription; TAS.
KW Collagen.
SQ SEQUENCE 171 AA; 17466 MW; 3B4A722EB83D33C2 CRC64;

Query Match 3.8%; Score 7; DB 4; Length 171;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GPEAAAL 12
Db |||||
110 GPEAAAL 116

RESULT 42
Q8K3C8
ID Q8K3C8 PRELIMINARY; PRT; 176 AA.
AC Q8K3C8;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

DE Hypothetical protein.
GN 2510009H09RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Strausberg R.;
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC022701; AAH22701.1; -.
DR MGD; MGI:1923839; 2510009H09RIK.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro; IPR000488; Death.
DR Pfam; PF00531; death; 1.
DR SMART; SM00005; DEATH; 1.
DR PROSITE; PS50017; DEATH_DOMAIN; 1.
KW Hypothetical protein.
SQ SEQUENCE 176 AA; 19839 MW; 5A45A1244A23FDE7 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 176;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 83 LASHLGL 89
Db |||||
91 LASHLGL 97

RESULT 43
Q919M1
ID Q919M1 PRELIMINARY; PRT; 178 AA.
AC Q919M1;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE CUN056 hypothetical protein.
GN CUN056.
OS Culex nigripalpus baculovirus.
OC Viruses; dsDNA viruses, no RNA stage; Baculoviridae.
OX NCBI_TaxID=130556;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Florida1997;
RX MEDLINE=21488685; PubMed=11602755;
RA Afonso C.L., Tulman E.R., Lu Z., Balinsky C.A., Moser B.A.,
RA Becnel J.J., Rock D.L., Kutish G.F.;
RT "Genome Sequence of a Baculovirus Pathogenic for Culex nigripalpus.";
RL J. Virol. 75:11157-11165(2001).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Florida1997;
RA Afonso C.L., Tulman E.R., Lu Z., Balinsky C.A., Moser B.A.,
RA Becnel J.J., Rock D.L., Kutish G.F.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF403738; AAK94134.1; -.
KW Hypothetical protein.
SQ SEQUENCE 178 AA; 19449 MW; 5CCE95FC15B713D1 CRC64;

Query Match 3.8%; Score 7; DB 12; Length 178;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 28 CSFSLPA 34
Db |||||
152 CSFSLPA 158

RESULT 44
O81265
ID O81265 PRELIMINARY; PRT; 180 AA.
AC O81265;
DT 01-NOV-1998 (TrEMBLrel. 08, Created)

DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE CAMP responsive element binding protein (Fragment).
OS Cichorium intybus (Chicory).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC campanulids; Asterales; Asteraceae; Cichorioideae; Cichorieae;
OC Cichorium.
OX NCBI_TaxID=13427;
RN [1]
RP SEQUENCE FROM N.A.
RA Messiaen J., Draye M., Beillefontaine F., Van Cutsem P.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF067187; AAC24123.1; --
DR GO; GO:0005634; C:nucleus; IEA.
DR GO; GO:0003677; F:DNA binding; IEA.
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR InterPro; IPR004827; TF_bZIP.
DR Pfam; PF00170; bZIP; 1.
FT NON TER 1
FT NON TER 180 180
SQ SEQUENCE 180 AA; 20262 MW; ACAF8BC830BB5888 CRC64;

Query Match 3.8%; Score 7; DB 10; Length 180;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 84 ASHLGLP 90
Db 49 ASHLGLP 55

RESULT 45
Q8S141
ID Q8S141 PRELIMINARY; PRT; 180 AA.
AC Q8S141;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE P0042A10.24 protein.
GN P0042A10.24.
OS Oryza sativa (japonica cultivar-group).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzeae; Oryza.
OX NCBI_TaxID=39947;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. Nipponbare;
RA Sasaki T., Matsumoto T., Yamamoto K.;
RT "Oryza sativa (japonica cultivar-group) genomic DNA, chromosome 1, PAC
RT clone:P0042A10."
RL Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AP033343; BAB90082.1; --
DR Gramene; Q8S141; --
SQ SEQUENCE 180 AA; 19779 MW; EB3CAFFDF6B98706 CRC64;

Query Match 3.8%; Score 7; DB 10; Length 180;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 31 SLPASSL 37
Db 106 SLPASSL 112

RESULT 46
Q9Y2B0
ID Q9Y2B0 PRELIMINARY; PRT; 182 AA.
AC Q9Y2B0;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)

DE Type II membrane protein (Saposin-like protein).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Gastric adenocarcinoma;
RX MEDLINE=99173880; PubMed=10072769;
RA Yokoyama-Kobayashi M., Yamaguchi T., Sekine S., Kato S.;
RT "Selection of cDNAs encoding putative type II membrane proteins on the
RT cell surface from a human full-length cDNA bank.";
RL Gene 228:161-167(1999).
RN [2]
RP SEQUENCE FROM N.A.
RA Bornhauser B.C., Olsson P.-A., Lindholm D.;
RT "NSAP is a novel saposin-like protein that interacts with MIR and
RT stimulates neurite outgrowth.";
RL Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AB015631; BAA76498.1; --
DR EMBL; AY032624; AAK38148.1; --
DR Genew; HGNC:13529; TMEM4.
DR GO; GO:0005887; C:integral to plasma membrane; TAS.
DR InterPro; IPR000886; ER_target_S.
DR InterPro; IPR008139; SaposinB.
DR PROSITE; PS00014; ER_TARGET; 1.
SQ SEQUENCE 182 AA; 20652 MW; BE726D302490733F CRC64;

Query Match 3.8%; Score 7; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 80;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
Db 5 GWLALLL 11

RESULT 47
Q9JMN5
ID Q9JMN5 PRELIMINARY; PRT; 182 AA.
AC Q9JMN5;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein.
GN GP6.
OS Bacteriophage WO.
OC Viruses.
OX NCBI_TaxID=112596;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20532614; PubMed=11080372;
RA Masui S., Kamoda S., Sasaki T., Ishikawa H.;
RT "Distribution and evolution of bacteriophage WO in Wolbachia, the
RT endosymbiont causing sexual alterations in arthropods.";
RL J. Mol. Evol. 51:491-497(2000).
DR EMBL; AB036666; BAA89632.1; --
KW Hypothetical protein.
SQ SEQUENCE 182 AA; 18739 MW; 108992AA9D96D656 CRC64;

Query Match 3.8%; Score 7; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 80;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 32 LPASSLS 38
Db 118 LPASSLS 124

RESULT 48
Q9QXT0
ID Q9QXT0 PRELIMINARY; PRT; 182 AA.
AC Q9QXT0;

DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-CCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Putative secreted protein ZSIG9 (5330432A10RIK protein) (Transmembrane protein 4).
GN TMEM4 OR ZSIG9 OR 5330432A10RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Sheppard P., Jelinek L., Whitmore T., Blumberg H., Lehner J.,
RA O'Hara P.;
RT "Mus musculus putative secreted protein.";
RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Pituitary, Pancreas, Embryo, and Hippocampus;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Kono H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaide I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Breast tumor;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF186115; AAF01433.1; -.
DR EMBL; AK019927; BAB31921.1; -.
DR EMBL; AK007914; BAB25346.1; -.
DR EMBL; AK013014; BAB28597.1; -.
DR EMBL; AK013568; BAB28909.1; -.
DR EMBL; BC008261; AAH08261.1; -.
DR MGD; MGI:1928477; Tmem4.
DR InterPro; IPR000886; ER_target_S.
DR InterPro; IPR008139; SaposinB.
DR PROSITE; PS00014; ER_TARGET; 1.
SQ SEQUENCE 182 AA; 20767 MW; 83E54E7F31EE9B87 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 182;

Best Local Similarity 100.0%; Pred. No. 80;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 15 GWLALLL 21

|||||

Db 5 GWLALLL 11

RESULT 49

ID 000485

AC 000485; PRELIMINARY; PRT; 200 AA.

DT 01-JUL-1997 (TrEMBLrel. 04, Created)

DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)

DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

DE Putative collagen homolog protein-a.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97459673; PubMed=9315633;
RA Zhang L., Pagano J.S.;
RT "IRF-7, a new interferon regulatory factor associated with Epstein-Barr virus latency.";
RL Mol. Cell. Biol. 17:5748-5757(1997).
DR EMBL; U53830; AAB80687.1; -.
DR GO; GO:0016481; P:negative regulation of transcription; TAS.
KW Collagen.
SQ SEQUENCE 200 AA; 20607 MW; 7B5DD5F8308651E7 CRC64;

Query Match 3.8%; Score 7; DB 4; Length 200;

Best Local Similarity 100.0%; Pred. No. 87;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 6 GPEAAAL 12

|||||

Db 139 GPEAAAL 145

RESULT 50

Q98HS8

ID Q98HS8 PRELIMINARY; PRT; 204 AA.

AC Q98HS8;

DT 01-OCT-2001 (TrEMBLrel. 18, Created)

DT 01-OCT-2001 (TrEMBLrel. 18, Last sequence update)

DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

DE Hypothetical protein mll2727.

GN MLL2727.

OS Rhizobium loti (Mesorhizobium loti).

OC Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;

OC Phyllobacteriaceae; Mesorhizobium.

OX NCBI_TaxID=381;

RN [1]

RP SEQUENCE FROM N.A.

RC STRAIN=MAFF303099;

RX MEDLINE=21082930; PubMed=11214968;

RA Kaneko T., Nakamura Y., Sato S., Asamizu E., Kato T., Sasamoto S.,

RA Watanabe A., Idesawa K., Ishikawa A., Kawashima K., Kimura T.,

RA Kishida Y., Kiyokawa C., Kohara M., Matsumoto M., Matsumo A.,

RA Mochizuki Y., Nakayama S., Nakazaki N., Shimo S., Sugimoto M.,

RA Takeuchi C., Yamada M., Tabata S.;

RT "Complete genome structure of the nitrogen-fixing symbiotic bacterium

Mesorhizobium loti.";

RL DNA Res. 7:331-338(2000).

DR EMBL; AP003000; BAB49788.1; -.

DR InterPro; IPR000086; NUDIX_hydrolase.

DR InterPro; IPR000059; UPF0035.

DR Pfam; PF00293; NUDIX; 1.

DR PROSITE; PS01293; UPF0035; 1.

KW Hypothetical protein; Complete proteome.

SQ SEQUENCE 204 AA; 22948 MW; A04D5FB18F811501 CRC64;

Query Match 3.8%; Score 7; DB 16; Length 204;

Best Local Similarity 100.0%; Pred. No. 89;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 PEAAALR 13

|||||

Db 90 PEAAALR 96

RESULT 49

ID 000485

AC 000485; PRELIMINARY; PRT; 200 AA.

DT 01-JUL-1997 (TrEMBLrel. 04, Created)

DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)

DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

Search completed: June 14, 2004, 08:08:13

Job time : 42 secs